

## TRANSDISIPLIN-BASED KKNI & SNPT CURRICULUM DEVELOPMENT MANAGEMENT IN THE STATE ISLAMIC UNIVERSITY NORTH SUMATRA MEDAN

*Siti Halimah*

Faculty of Tarbiyah Science and Teacher Training, State Islamic University of North Sumatra,  
Medan - Indonesia

---

e-mail: [sitihalimah@uinsu.ac.id](mailto:sitihalimah@uinsu.ac.id)

---

**Abstract:** This article aims to discuss curriculum development management based on Transdisciplinary-based KKNI & SNPT in UINSU Medan as a response to national policy and UIN SU's scientific paradigm shift after status change. This study used a qualitative approach with observation and interview data collection tools, and document studies. The study found: (1) The preparation of lecturers in developing the Transdisciplinary KKNI & SNPT curriculum based on KKNI workshops held at UIN, Faculty and study program levels, practicing syllabus, and lesson plans according to the characteristics and demands of KKNI & SNPT; (2) the support of position holders in the success of curriculum implementation by making curriculum workshops at the university level, arranging curriculum development teams and transdisciplinary teams, recommending that each study program conduct curriculum workshops specifically; (3) the pattern of transdisciplinary development in curriculum development at UIN-SU Medan is carried out with science-islamization or islamization-science. This finding has implications for the need of further studies through research on model development and curriculum assistance in reference to the transdisciplinary-based KKNI & SNPT at the Islamic tertiary level by selecting a model in accordance with the study program's uniqueness

**Keyword:** Curriculum development, KKNI & SNPT, management, Transdisciplinary

### INTRODUCTION

The implementation of tertiary education has a central role in fostering a generation of people who are intelligent, religious, characterized and cultured.<sup>1</sup> The Industrial Era 4.0 demands on university graduates to have new literacy abilities including data literacy, technological literacy and noble moral literacy based on religious beliefs. To meet these demands and respond to these challenges, the government is taking policy steps so that curriculum development in every university must refer to the KKNI and National Education Standards (SNPT).<sup>2</sup>

The integration of KKNI & SNPT in the tertiary curriculum aims to encourage the improvement of the quality and accessibility of Indonesian human resources to the

---

<sup>1</sup> Tujuan Pendidikan Nasional dalam Undang-Undang Sistem Pendidikan Nasional Nomor 20 tahun 2003.

<sup>2</sup> Kemenristek Dikti. *Panduan Penyusunan Kurikulum Pendidikan Tinggi di Era Industri 4.0.* (Jakarta: 2018), p.10.

national and international labor market, build an accountable and transparent recognition process, obtain a positive correlation between tuition and learning outcomes and processes. This form of higher education product will strengthen the accountability of the implementation of education in a tertiary institution and make it easier for graduates to face the Asean Economic Community (AEC), because their abilities can be equated with graduates from universities in ASEAN.<sup>3</sup>

Curriculum development refers to KKNI & SNPT in higher education which has a fairly strong legal basis, starting from the 1945 Constitution, article 31, then mandated by Law Number 20 of 2003 concerning the National Education System, which states that education is carried out as a systemic unit with open and multi-meaning system. Then it was emphasized by the issuance of Presidential Regulation No. 8 of 2012 concerning the Indonesian National Qualification Framework (KKNI), which was later contained in Minister of Education Regulation No. 73 of 2013 concerning the Implementation of the Indonesian National Qualification Framework in Higher Education.

The rapid development of science, technology and industry is moderate and has implications for various social lives of the people. So it requires an active role of universities to encourage young people to be able to think scientifically using technology for the benefit of research and development as well as problem solving comprehensively by using the integration of religious science, science and technology.

The description of the importance of the integration of religious science, science and technology in problem solving is based on the idea that to find logical connections requires thinking from various disciplines to get the best and perfect solution to problems. In this context the Transdisciplinary approach has a strong foundation to be applied in tertiary institutions. This is based on the idea that, demands for solving complex problems require a multidisciplinary approach to science. For example, for the resolution of educational problems, it cannot only be viewed from the pedagogical or educational aspects of education, but must be reviewed from various other aspects such as aspects of sociology, anthropology, politics, and public policy. Therefore, system integration is needed to perfect educational creativity because education is part of an integral structure and broad social process. Need to be informed that in other countries in understanding the issue or problem is done by using various scientific perspectives that are learned under the name of social scientific issues (SSI).

---

<sup>3</sup>Irianto, S. dalam Pidatonya sebagai Direktur Sekolah Pascasarjana Multidisiplin UI yang dimuat dalam Surat Kabar Nasional, (Jakarta, terbit pada tanggal 25/2/2014).

For higher education institutions that still apply curriculum that is marked by the viewpoints of separate disciplines, and rigid linearity view, it will weaken the role of higher education itself. Discipline of science must not be a limiting box for a person's way of thinking, behaving, and acting, scientific disciplines must be open and the truth is always developing so that according to him transdisciplinary education is aimed at the benefit of mankind, not disciplined knowledge.<sup>4</sup> For universities that implement curriculum development using the Transdisciplinary approach will not only show their existence in the community but also as a response mandated by UNESCO so that universities participate actively in finding the best solutions to global problems that exist today.<sup>5</sup>

The demand for the importance of problem solving by using a knife analysis of various disciplines is an effort to meet the development of the demands of the times. Because all knowledge and skills in the future are the results of research with transdisciplinary colors. Science production is a social process that is disseminated globally, and locally, through various forms and places, in the future there will be a reconfiguration of knowledge. This indicates that to deal with the various complexities of the academic community it is not enough to simply be prepared by monodiscipline based on its logic, but also requires a trisciplinary orientation through interpenetration of ratios, emotions, intuition, and creative talent. So it can be emphasized that, solving problems using a multidisciplinary approach is a demand that must be carried out. Nevertheless it does not mean that monodiscipline is not important to be used as an intensive study. On the contrary, intensive study of monodiscipline will strengthen the function of its linkages with various aspects of life, so that the realization of knowledge that reinforces and complement each other.

The various facts above, strengthen the importance of management studies of curriculum development based on transdisciplinary-based KKNi & SNPT in Islamic tertiary institutions. In addition to meeting the demands of the globalization of scientific paradigms and learning curricula using a transdisciplinary approach, it is a central issue that is widely discussed in order to improve the quality of education. Because of this, many Islamic tertiary curricula have adopted a multidisciplinary approach. Among Islamic tertiary institutions that apply a transdisciplinary approach, namely UINSU Medan who intends to realize scientific research and science of Islamic Islamization as stated in the vision,

---

<sup>4</sup>Hamid, H.S. "Transdisciplinarity dalam Pendidikan dengan Referensi Khusus pada Kurikulum", *Makalah* disajikan dalam Seminar tentang Transdisciplinarity, di Universitas Negeri Jakarta, (29 Oktober 2007).

<sup>5</sup>Unesco. *Transdisciplinarity Stimulating Synergies, Integrating Knowledge*. Unesco: Division of Philosophy and Ethics. (Unesco: 1998), p. 31

mission and objectives of UIN-SU that is to realize and develop research and thought of Islamic Islamization (sciences) by making revelations / sciences. the Qur'an as a source, thought comes from (kalam, philosophy, Sufism, fiqh), which practice by considering (culture and civilization). Then IAIN Kendari Sulawesi aimed at building links and connectedness from various disciplines in problem solving.

It is realized that an innovation (change) can certainly be accompanied by various obstacles, including lecturers difficult to implement in accordance with curriculum requirements, students in the process of conducting lectures. This is evident from the results of research that found that in general prospective teacher students had difficulty understanding material using transdisciplinary integration, likewise lecturers had difficulty integrating with other sciences.<sup>6</sup>

Although there are many obstacles faced in applying the curriculum for KKNI and SNPT based on Transdiscipline, the existing constraints cannot be used as a reason to postpone the demands given the application of KKNI & SNPT in the curriculum as a form of quality and identity of a university (UIN SU) related to the system national education and training they have. Therefore, this study can be used as a first step to review curriculum development at UIN SU Medan. 1) How to prepare lecturers to implement the Transdisciplinary-based KKNI & SNPT curriculum. 2) How is the role of stakeholders in realizing the implementation of Transdisciplinary-based KKNI & SNPT curriculum; 3) How is the pattern of curriculum development referring to Transdisciplinary-based KKNI & SNPT at UIN SU Medan.

## LITERATURE REVIEW

On January 17, 2012 the government established a policy on the Indonesian National Qualification Framework (KKNI) which was then legally declared in Indonesian Presidential Regulation No. 8 of 2012 concerning the Indonesian National Qualification Framework (KKNI). This policy is based on the results of an analysis of curriculum trips that take into account the recommendations of the Teacher Education Summit held on December 14-16, 2011 in Jakarta, where the government through the Directorate General of Higher Education Ministry of Education and Culture seeks to develop curriculum models in accordance with current demands, including the need to promote character education, maximize the use of technology information in education. Responding to these demands

---

<sup>6</sup> Kurnia, A.R.D, dkk., *Desain Multidisipliner dan Transdisipliner Untuk Melatih Keterampilan Pemecahan Masalah*, Atlantis press. 2017 online di <https://www.atlantis-press.com/proceedings/icomse-17>. ISBN 978-94-6252-545-0. ISSN 2352-5398. doi:10.2991/icomse-17.2018.29.

the application of the IQF in the tertiary curriculum is the most important thing as a manifestation of the quality and identity of a tertiary institution related to the national education and training system that is owned.

To facilitate the matching and alignment with education results of other nations the implementation of the IQF in tertiary institutions needs to be equipped with measuring devices. Therefore, in Permenristekdikti No. 44 of 2015 in Article 1, explained that KKNI is a set of plans and arrangements regarding graduate learning achievements, study materials, processes and assessments that serve as guidelines for the implementation of study programs. With this completeness, KKNI can be used as a tool to screen only qualified graduates who can work or occupy the profession according to their expertise.

In the context of the application of Transdiscipline at UIN SU Medan, the transfer of status of IAIN SU Medan to UIN SU Medan does not leave its identity as a center for Islamic studies. Because the general sciences that will be developed at UINSU are not the same as the sciences developed at other tertiary institutions. This needs to be done considering that along with the times requires integrated problem solving and cooperation in various fields of science to overcome contemporary humanitarian problems.<sup>7</sup>

Transdisciplinary is defined as a process characterized by the integration of various disciplines to understand an issue or problem. Actually, since the introduction of the 2013 curriculum the issue of transdisciplinary has been echoed, for example the introduction of integrated social studies or integrated science is an illustration of the concept of the transdisciplinary approach, in which the concepts of disciplines are mixed and / or related to the problems encountered around them. The implementation of problem solving learning is introduced by the way students gain learning experiences by using a transdisciplinary approach that demands the phenomenon of problem solving investigations be carried out through scientific and contextual methods. This approach is known as a contextual scientific approach where problems are examined through observing, questioning, experimenting, associating, and networking activities. This learning process illustrates the transdisciplinary approach in terms of methods or methods. Whereas engaging students in real life is a transdisciplinary picture in terms of context. Such teaching and learning activities in other countries are known as social scientific issues (SSI), in which to understand the issues or problems of students are taught by using various scientific perspectives.

---

<sup>7</sup>Lubis, Fadhil., N.A. *Rekontuksi Pendidikan Tinggi Islam* dalam buku *Panduan Akademik UIN SU*. (Medan, 2016), p. v

Various things above, provide a strong reason to conduct a study of curriculum development at UIN SU by referring to the curriculum development guidelines referring to KKNI & SNPT and the signs of Transdisciplinary development at UIN SU Medan. This is important to examine the ways lecturers integrate the KKNI & SNPT standards as well as the pattern of developing a Transdisciplinary approach in the courses they teach in accordance with the specified learning achievement targets.

## **METHODOLOGY**

This study uses a qualitative approach with selection reasons to describe the problems faced by lecturers in designing learning based on Transdisciplinary-based KKNI & SNPT. Data collection tool relying on the results of interviews, and documentation of young lecturers who took part in the 2018 lecturer nursery workshop.

Data information was obtained through observation, interviews, and study documents of young lecturer RPS who participated in the nursery of lecturers in 2018, then the results were discussed using relevant theory reviews. Interview conducted is two-way interaction (Merriam, 2009; Flick, 1998; Kvale, 2007; Marshall and Rossman, 1989; Othman, 2007), which is not possible to be obtained through observation (Taylor and Bogdan, 1984) in a relatively short period of time (Cohen and Manion, 1989).

## **FINDINGS AND DISCUSSION**

### **Lecturer preparation in developing the KKNI curriculum, SNPT based on Transdiscipline at UINSU Medan**

Lecturers as curriculum implementers are required to be ready to be able to design, implement, and evaluate lectures referring to KKNI, SNPT and Transition-based. In the context of the readiness of the young lecturers making preparations for the semester learning plan (RPS) by containing the final ability component, study material, forms of learning, student learning experiences, assessment criteria and percentage of weighting in each aspect of assessment. Fulfillment of the various component criteria illustrates the standardization of learning and assessment. However, from the results of the workshop, it was found that not all young lecturers were able to realize KKNI & SNPT standards and Transdisciplinary-based RPS even though they had participated in KKNI workshops held at UIN, Faculty and study program levels. If presented from 89 training participants, only 20% (15 to 20 people) were able to formalize the RPS that was characterized by KKNI, Transdisciplinary-based SNPT. This fact indicates that many young lecturers still need



follow-up curriculum development workshops conducted at the university level within two days. This is important because there must be three competencies that must be possessed by lecturers, namely; planning learning; carry out classroom management and learning; and interpersonal skills.

KKNI is a set of plans and arrangements regarding graduate learning achievements, study materials, processes, and assessments that are used as a guide for the implementation of study programs. All of this must be realized by lecturers correctly as a form of professionalism in carrying out their profession. To be able to meet the achievement of competencies as curriculum implementers, young lecturers need further workshops at the study program level and assistance from senior allied lecturers. This is done considering the increase in professionalism needs to be done by involving senior educators in educational activities, teaching and learning and professional development.

The above matters are carried out as a form of efforts of UINSU Medan to produce high-quality human resources and be able to adapt to global demands that require quality improvement from all dimensions not only at the level of curriculum concepts but also to support quality curriculum implementers (lecturers). In line with the statement that to produce quality human resources, we need quality education as well.<sup>8</sup> Likewise, what other countries are doing is to produce quality human resources in the California Master Plan for Education (2003) various things that need to be prepared include: 1) qualified and inspirational teachers; 2) a ready-made curriculum that can prepare all students for success in post-secondary education, work, and society; 3) Text books, technology, and teaching materials must be aligned or linear; 4) Services / facilities that support adequate learning; 5) Qualified school or college administrators, maintaining an inviting and safe educational culture, and high appreciation of student achievement and teaching excellence; 6) Safe physical learning environment, complete infrastructure advice and well maintained.

### **Stakeholder support for successful curriculum implementation refers to KKNI, Transdisciplinary-based SNPT**

Concern and support from various parties, especially position holders, is needed to expedite the process of developing the curriculum for KKNI & SNPT based on Transdiscipline at UIN SU Medan. This study found that there was serious commitment from stakeholders to implement a curriculum based on KKNI & SNPT and Transdisciplinary-based. This is manifested in the form of program policies, namely: (a)

---

<sup>8</sup>Hussain, J., "Improving Teacher Quality, A Keyword for Improving Education Facing Global Challenge". *TOJET Journal*, Volume 4. Issues 1, 2005.

requiring young PNS and BLU lecturers to take part in a three-day lecturer nursery workshop with material on training in preparing RPS, teaching materials and evaluation based on Transdisciplinary KKNi & SNPT based; (b) putting together a curriculum development team and a transdisciplinary study center; (c) recommend that each study program conduct a workshop on curriculum design and improvement in accordance with the demands of KKN &, SNPT based on Transdisciplinary.

For the perfection of the results of the curriculum an involvement and proactive curriculum of all parties in governance and curriculum development needs to be realized. By building synergies between campus elements that pay attention to overall order, and campus management will be able to bring a positive stigma to all lines. All of this needs to be done considering to increase professionalism, educators (lecturers) must be involved in activities including; education, teaching and learning process and professional development, because professionalism emphasizes the mastery of skills and strategies or the implementation of knowledge management.<sup>9</sup>

### **The pattern of curriculum development refers to the Transdisciplinary-based KKNi & SNPT at UINSU Medan**

The pattern of curriculum development refers to the Transdisciplinary-based KKNi & SNPT at UINSU based on Peremenristik Dikti No. 44 of 2014 to formulate attitudes and general skills achievements. For knowledge competencies and special skills refer to Presidential Regulation No. 8 of 2012. Whereas to realize Transdiscipline is done using the pattern of science-Islamisai or Islamization-science. In the sense that lecturers supporting religious subjects, the development of transdiscipline is carried out by means of certain topics and problems solving the problem not only from a religious perspective but by involving scientific perspectives. Conversely for lecturers supporting science subjects, problem solving is not only done in terms of science alone but by linking to the field of religious science. This is done with the aim that problem solving is more comprehensive. In accordance with Charter's statement in Hasan, philosophically education must use an eclectic approach in which the philosophies of essentialism, perennialism, progressive, and social reconstruction are formulated based on the interests of transdisciplinary education. Eclectic philosophy views the education of scientific disciplines as an instrument of education to develop the desired quality of human beings, namely intelligent people who have exceptions to problems in society and have the ability to contribute to help solve

---

<sup>9</sup> Tanang, H & Abu. B. "Teacher Professionalism and Professional Development Practices in South Sulawesi, Indonesia". *Journal of Curriculum and Teaching*. Vol. 3, No. 2, 2014.



these problems. On the basis of this view, education no longer separates itself from the community but develops and interacts with the community.

Likewise, in the process of implementing learning contained in RPS lecturers need to be described the learning process that characterizes the integration of various disciplines. This is in line with the view that understanding an issue or problem requires the integration of knowledge from various relevant disciplines. Along with the development of the times needed integrated and comprehensive problem solving requires cooperation in various fields of science to overcome contemporary humanitarian problems.<sup>10</sup> Life in the future will be faced with many problems. Problems that are very complex require problem solving not only by relying on one discipline, but multidisciplinary.<sup>11</sup> Therefore the demand for integrated learning is a means for students to practice seeing problems and solving them from various scientific perspectives. This can be obtained through scientific work, being scientific, working together in groups, learning to interact and communicate.<sup>12</sup> Other than that. to be able to overcome life's increasingly complex challenges, educators must be able to practice their skills to face the challenges of the 21st century.<sup>13</sup>

## CONCLUSION

The findings of this study conclude: lecturers prepare themselves by attending workshops, and practice making RPS and syllabus based on Transdisciplinary-based KKNi & SNPT; support from position holders by making policies requiring young lecturers to attend workshops both at the university and study program levels, creating curriculum development teams and Transdisciplinary teams; the pattern of curriculum development for the development of general attitudes and skills is guided by the SNPT, knowledge and special skills in the KKNi, while transdependent with the pattern of science-Islamization or Islamization-science.

This study was conducted in the scope of young UINSU Medan lecturers, however this study can explore further studies by discussing the issue of workshop models and

---

<sup>10</sup> Lubis, N.A. Fadhil. Knowledge Integration In Transdisciplinary Perspective foundations To Build UIN-SU, *Makalah Proceeding* 2016. online: <http://repository.uinsu.ac.id/83/1/INTEGRASI-TRANSDISIPLINER4-REKTOR.pptx>

<sup>11</sup>Unesco. (1998). *Transdisciplinarity Stimulating Synergies, Integrating Knowledge*. Unesco: Division of Philosophy and Ethics.(Unesco: 1998), hal. 31

<sup>12</sup> Indrawati. *Model Pembelajaran Terpadu di Sekolah Dasar untuk Guru SD*. (Jakarta: Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan Ilmu Pengetahuan Alam [PPPPTKIPA], 2009), p. 36

<sup>13</sup>Widhy, P. "Integrative Science untuk Mewujudkan 21st Century Skill dalam Pembelajaran IPA SMP." *Makalah Seminar Nasional*, MIPA UNY, 2013.

curriculum development assistance based on Transdisciplinary-based KKNI & SNPT in accordance with the target learning outcomes of graduates of each study program, campus and global demands , so that it can be used as a research development model for curriculum development and mentoring based on Transdisciplinary KKNI & SNPT based at the Islamic tertiary level.

## REFERENCES

- Al Mawardi (2011). *"Peningkatan Kompetensi Pedagogik Dosen di Jurusan Teknik Sipil Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga. Bandung*
- Cohen, L., & Manion, L. (1989). *Research Methodes in Education*. 3rd. Routledge. London.
- Direktorat Jenderal Pembelajaran dan Kemahasiswaan, Kemenristek Dikti (2018), *Panduan Penyusunan Kurikulum Pendidikan Tinggi di Era Industri 4.0*. Jakarta
- Effendi. S (2003), *"Mengelola Perguruan Tinggi Dalam Menghadapi Tantangan Global"*. Presented on national seminar of the chancellery chapter of Indonesia, at Makassar. Retrieved in December 4, 2017 from [www.sofian.staff.ugm.ac.id](http://www.sofian.staff.ugm.ac.id)
- Flick, U. (1998). *An Introduction to Qualitative Research*. Sage Publication. Francisco
- Hamid, H.,S. "Transdisciplinarity dalam Pendidikan dengan Referensi Khusus pada Kurikulum", *Makalah* yang disajikan dalam Seminar tentang Transdisciplinarity, diUniveristas Negeri Jakarta, 29 Oktober 2007.
- Hussain, J (2005), *"Improving Teacher Quality, A Keyword for Improving Education Facing Global Challenge"*. TOJET Journal, Volume 4. Issues 1, article 4.
- Indrawati. (2009). *Model Pembelajaran Terpadu di Sekolah Dasar untuk Guru SD*. Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan Ilmu Pengetahuan Alam (PPPPTKIPA). Jakarta
- Kemenristek Dikti. (2018). *Panduan Penyusunan Kurikulum Pendidikan Tinggi di Era Industri 4.0*. Jakarta
- Kurnia, A.R.D, dkk. (2017), *Desain multidisipliner dan transdisipliner untuk melatih keterampilan pemecahan masalah*, Atlantis press. <https://www.atlantispress.com/proceedings/icomse-17>. ISBN 978-94-6252-545-0. ISSN 2352-5398. DOI doi:10.2991/icomse-17.2018.29
- Lubis, N.A. Fadhil. (2016) Knowledge Integration In Transdisciplinary Perspective Foundations To Build UIN-SU, makalah proceeding online: <http://repository.uinsu.ac.id/83/1/INTEGRASI-TRANSDISIPLINER4-REKTOR.pptx>
- Peraturan Menteri Pendidikan dan Kebudayaan Nomor 49 Tahun 2015 tentang *Standar Nasional Pendidikan Tinggi*
- Peraturan Presiden Nomor 8 Tahun 2012, tentang *Kerangka Kualifikasi Nasional Indonesia (KKNI)*
- Peraturan Presiden Republik Indonesia Nomor 131 Tahun 2014 tentang *Perubahan Institut Agama Islam Negeri Sumatera Utara Medan menjadi Universitas Islam Negeri Sumatera Utara Medan*.

Permendikbud Nomor 73 Tahun 2013 tentang *Capaian Pembelajaran sesuai dengan Level KKN*

Sulistyowati, Irianto. (2014). Direktur Sekolah Pascasarjana Multidisiplin UI dalam surat kabar nasional (25/2/2014).

Tanang, H & Abu. B (2014), "*Teacher Professionalism and Professional Development Practices in South Sulawesi, Indonesia*". *Journal of Curriculum and Teaching*. Volume 3, No. 2

Taylor, S.J. & Bogdan, R. (1984). *Introduction to Qualitative Research Methods*, 2nd ed., Wiley. New York. NY.

Undang-Undang Sistem Pendidikan Nasional, nomor 20 tahun 2003

Unesco. (1998). *Transdisciplinarity Stimulating Synergies, Integrating Knowledge*. Unesco: Division of Philosophy and Ethics.

Widhy, Purwanti. (2013). Integrative Science untuk Mewujudkan 21st Century Skill dalam Pembelajaran IPA SMP. *Makalah seminar nasional MIPA UNY*.