

Transdisciplinary English Language Learning and Assessment in Inclusive Education for Rural Primary School in Sabah

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Abstract: The introduction of Malaysia Education Blueprint 2013-2025 showed that the Ministry of Education (MOE) really hold the desire to improve the quality of Malaysian Education in align with the blueprint aspiration where every child could earn fair access to an education so that children can seize to their potential. With the implementation of inclusive education in Malaysian education, transdisciplinary learning and assessment can be one of the innovative ways to teach and assess students, where the key aim of transdisciplinary learning is for students with different knowledge and ability to be able to learn and practice English language, also can be assess effectively according to their interest and most important is their ability. Therefore, this study will discuss conceptually about transdisciplinary learning and assessment in English language learning students and the effectiveness of transdisciplinary learning and assessment for the students especially in inclusive education in the primary school. From the discussion, hopefully it would bridge the gap of the teaching perception among teachers who teach in the inclusive classroom in primary school.

Keywords: transdisciplinary learning; transdisciplinary assessment; inclusive education

INTRODUCTION

Mastering the basic skills of Bahasa Malaysia and English language in school had been one of the most important key points in the Malaysian Education Blueprint. This means that, doing the right way of teaching and learning is very important as it could affect the students' ability to learn. Sustainable learning involves approach that includes everyone in terms of educating and learning with secure and fair condition in a complex and diverse environment. In the context of sustainable development, inclusive education had become one vital part of the education. That is why the Malaysia Ministry of Education (MOE) begin the efforts and committed to include and making sure that "every Malaysian child deserves equal access to an education" (MOE, 2013), which includes the initiatives of "Zero Reject Policy" by the Malaysia Deputy Education Minister Teo Nie Ching.

Educating children identified as having disabilities and/or special educational needs alongside their peers in regular schools (Dyson, 2019) had become one of the most crucial and important operation in education system, because "there is no such thing as the perfect model of inclusive education that would suit the realities of any given cultural-historical context" (Artiles & Dyson, 2005) (Polat & Helmer, 2019). It is a huge misconception that these non-mainstream programmes provide better learning outcomes and environment for children with special needs (Malaysiakini, 2019). Because even in the mainstream classes, normal students sometimes cannot even understand or even get what the teachers' talk about during lessons. Some even have "very limited basic skills in reading, writing and arithmetic" (Ang & Mohamad, 2018).

Developing a relevant English subject classroom activity that infusing scientific inquiry, visual arts and music actually provides a much more interesting and alternate ways to promote better English learning, especially in the inclusive classroom. It also helps students to engage and develop their own ideas where the students itself as learner will have initiative to learn something more than what the teacher could give during the teaching and

learning process. The reason is because education now a days is not just about passing the examination, but also “requires 21st century skills as workplace needs highly skilled workers to deal with complex interactive tasks” (Lee & Wong, 2019). Theoretically, through transdisciplinary learning, students are able to incorporate other skills during English lessons and also actually helps to assess students especially special students easily according to the Classroom-Based Assessment (PBD).

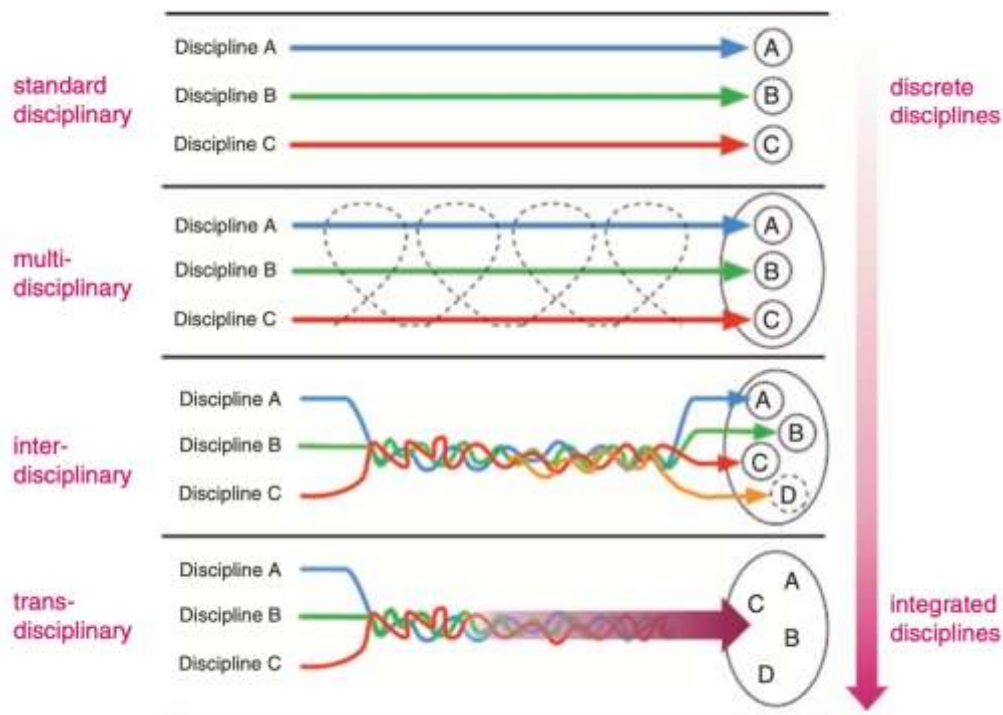
WHY TRANSDISCIPLINARY LEARNING AND ASSESSMENT?

What is transdisciplinary learning anyway? And why does it help the students to be able to learn and assess especially in the inclusive education? Figure 1.0 helps to understand what is the difference between the standard disciplinary (which is the current) and transdisciplinary.

In short, transdisciplinary pedagogy “focuses on the problem at hand, and on bringing to bear a broad spectrum of knowledge and understanding with which to tackle these problems” (Clarke & Ashhurst, 2018). In this research, English subject in primary school is not just a subject that can be taught traditionally. Therefore, transdisciplinary learning for English subject in primary helps to open up a lot more patterns and opportunity for the students that enables them to get deep learning that involves their habits of mind. It is a synergistic combination of values, attitudes, beliefs, skill, knowledge and behavior (Klein, 2018). The effectiveness of transdisciplinary learning is inevitably perpetuated by the education system that was founded based on the Malaysian values and culture. In addition, with the enormous diversity among Malaysian students, transdisciplinary learning enables the students to learn and be able to assess without emphasizing their background or social status. In addition, transdisciplinary learning and assessment support on the recent UNESCO report on “Commission international sur l’éducation pour le vingt et unième siècle”, where it emphasized on “four pillars of new kind of education: learning to know, learning to do, learning to live together with, and learning to be” (Nicolescu, 2018).

With the emergence of the 4th Industrial Revolution, student need to be prepared with as many skills and knowledge together at once. Because with the new era, the definition of intelligence will not be static and the same as what we had already know. Therefore, transdisciplinary learning plays major role because “under transdisciplinary, subject specialization and specificity become less important” (Fam, Lembach, Kelly, Hitchens, & Callen, 2018)², thus making knowledge mergeable, expandable and transcend altogether. In the educational context this translates into a new kind of learning, where the challenge, problem or project-based approach treats traditional pedagogy and disciplinary expertise as a foundation (Fam, Lembach, Kelly, Hitchens, & Callen, 2018)³. In short, transdisciplinary learning and assessment enables teachers to create effective solutions towards the students’ weakness with different discipline of knowledge and experience.

Figure 1.0 Defining integrative approaches to teaching and learning (Fam, Lembach, Kelly, Hitchens, & Callen, 2018)



FINDINGS AND DISCUSSIONS

The research was done based on the learner center approach or also known as the student center approach. This approach for learning and teaching brings optimism and opportunity for both learners and educators in education (Baporikar, 2017). In order to identify the differentiation and effectiveness of transdisciplinary learning in the English class, the researcher had collected the data based on three learning domains which are cognitive, affective, and psychomotor. The cognitive domain is defined in accordance to the Anderson and Krathwohl taxonomy "cognitive process levels which are: remembering, understanding, applying, analyzing, evaluation and creating" (Adesoji, 2018). For the affective domain, David Krathwohl's dimensions were used in this assessment. According to Wilson (2016), Krathwohl's affective objective can be divided into a hierarchy which includes receiving, responding, valuing, organization, and characterization. And the last main domain is psychomotor, which was taken from Dave's Taxonomy. According to Andreatta and Dougherty (2019), the Dave taxonomy includes five levels of progressive psychomotor mastery. The five levels are imitation, manipulation, precision, articulation, and naturalization. Table 1.0 shows the findings of the ten assessed students' participations and results based on the standard learning and transdisciplinary learning.

Table 1.0 Students' participation result on standard learning and transdisciplinary learning.

LEARNING DOMAINS	DIMENSIONS OF DOMAIN	STANDARD LEARNING	TRANSDISCIPLINARY LEARNING
Cognitive (Knowledge)	Remember	9	10
	Understand	7	10
	Apply	7	10
	Analyze	2	5
	Evaluate	2	9
	Create	5	9
Affective (Attitude)	Receiving	4	10
	Responding	3	10
	Valuing	6	9
	Organization	6	8
	Characterization	3	7
Psychomotor (Skills)	Imitation	10	10
	Manipulation	7	8
	Precision	7	9
	Articulation	10	10
	Naturalization	2	5

Based on the given table, it shows a very significant differences in terms of number of students that participate in the lesson and achieve the domains given. These domains or elements play a significant role in terms of the students' performance and the students' assessment because it helps the teachers to be able to create an understanding the relationship between the students' prior knowledge, their educational experience and result. This is because, when the teacher is assessing the students, the "purpose is not so much to make a judgement on how a student, class or school is performing, to evaluate an instructional program, or to provide information that can be used for the selection of those to be awarded of scholarships, but to provide teachers, students and parents with information that can be used to guide individual improvement in the learning process" (Kitta & Tilya, 2010).

The application of transdisciplinary learning for English subject involves a series of different activity ranging from science, games and to the most recent music that the students loves. The main rules that was being adapted in the English Language transdisciplinary learning is that students are allow to make their own choices of projects or ways to learn for their next class with the teacher's assistant or guidance. While in standard learning, students were asked to make choices only based on what was given in their syllabus and textbook theme, and also mostly will be conducted by the teachers itself. But in transdisciplinary learning, helps created multisensory-based, interactive and management environment that involves not just learning a knowledge, but also learning as a human between one another. It provides a comfortable environment for the students to express themselves without judgement which what makes learning easier because students, even the adults, are mostly being inactive or silent because of afraid of being judge by others.

Figure 2.0 Show picture of students' participation in transdisciplinary learning

When students were asked, about 95% of them prefer to study or learn in groups rather than in pairs or individually. The rest of 5% weren't prefer group work, but they are being picky about who they are together with in the given group. This reason when asked was because they prefer to be with someone who is as better as or better than them so that they could achieved a better result of work or making them working in an easier situation. Although it sounds like a normal child excuse to achieved the best thing in their work, but it is not an

excuse to being picky with whoever they need to work with or deals with. Social discrimination among students happens more often than we really realize. Sometime the teachers discriminating the students openly without realizing that it contributes to multiple forms of discrimination among pupils. Students with disability (minor or major) “is unique as one of the only minority groups one could either be born into or could join at any time” (Bogart, Rosa, & Slepian, 2019). Therefore, children need to learn that if they are much better than anyone else, then they have to be able to contribute by helping others to be more than better. That is why, after a few sessions of different activity in transdisciplinary learning with the children, the student started to show positive changes and became actively engage voluntarily whenever weak students or the special students are placed with them. They showed patience and care throughout the learning process.

Implementing transdisciplinary learning and assessment had shown a tremendous improvement among students in English language reading. In 8 months of transdisciplinary learning, about 99 % of the students are able to read short English text without the assistant or guidance from teacher in front of the whole school during the school assembly. It has clearly show positive changes among the students not just in terms of their ability to read correctly, but also had shown positive attitude toward their own self confidence in front of other peers. Their bravery to share information that they read from a text in a language that was not used by them in everyday life shown that somehow, the children manage to use English language as language that they can apply with everyone without feeling afraid of being judge or criticize, but most importantly without the “students’ fear of making mistakes” (Dalem, 2017).

CONCLUSION

The research shows a lot of positive outcome with the implementation of transdisciplinary learning in English language for inclusive education. In correlation with the 21st century learning, a lot of new teaching and learning approach should be identify and implement, instead of maintaining the standard teaching and learning style. It is important that “meaningful learning occurs in a structured learning environment where the students gradually become more independent, have increased self-awareness and are provided with the context and links to practice knowledge and skill, and can critically appraise their work” (Cleak & Wilson, 2019). As primary professionals, it is our responsibility to steer the creative development of young people in our care (Cremin & Barnes, 2018). Therefore, it is already the right time for the Malaysian teachers and ministry to work together in order to make a new strong reformation for a greater future Malaysia.

REFERENCE

- Adesoji, F. A. (2018). Bloom Taxonomy of Educational Objectives and The Modification of Cognitive Levels. *Advances in Social Sciences Research Journal*, 292-297.
- Andreatta, P., & Dougherty, P. (2019). Supporting the Development of Psychomotor Skills. In D. Nestel, K. Dalrymple, J. T. Paige, & R. Aggarwal, *Advancing Surgical Education* (pp. 183-196). Singapore: Springer.
- Ang, T., & Mohamad, M. (2018). The Effects of Common European Framework of Reference (CEFR) Towards English LINUS Year 2 Students in Keningau Sabah. *International Journal of Education Islamic Studies and Social Sciences Research (IJEISR)*, 1-9.
- Artiles, A., & Dyson, A. (2005). *Inclusive education in the globalization age: The promise of comparative cultural-historic analysis*. London: Routledge.
- Baporikar, N. (2017). *Learner Centred Approach for Global Leadership in Management Education*. Premier Reference Resource.
- Bogart, K. R., Rosa, N. M., & Slepian, M. L. (2019). Born that way or became that way: Stigma toward congenital versus acquired disability. *SAGE*, 594-612.
- Clarke, E., & Ashhurst, C. (2018). Making Collective Learning Coherent: An Adaptive Approach to the practice of Transdisciplinary Pedagogy. In *Transdisciplinary Theory, Practice and Education* (pp. 151-165). Springer.
- Cleak, H., & Wilson, J. (2019). *Making the most of field placement*. Australia: Cengage.
- Cremin, T., & Barnes, J. (2018). Creativity and creative teaching and learning. *Routledge*.
- Dalem, M. (2017). Difficulties of speaking that are encountered by English language students at Al Margeb University. *PREMISE Journal of English Education*, 20-29.
- Dyson, A. (Ed.). (2019). *Towards Inclusive Schools?* (Vol. 6). New York: Routledge.

- Fam, D., Lembach, T., Kelly, S., Hitchens, L., & Callen, M. (2018). Meta-considerations for Planning Introducing and Standardising Inter and Transdisciplinary Learning in Higher Degree Institutions. In *Transdisciplinary Theory, Practice and Education*. Springer.¹²³
- Kitta, S., & Tilya, F. (2010). Assessment Status of Learner-centred Learning in Tanzania in the Context of the Competence-based Curriculum. *University of Dar es Salaam Journals*, 1-14.
- Klein, J. T. (2018). Learning in Transdisciplinary Collaborations: A Conceptual Vocabulary. In D. Fam, L. Neuhauser, & P. Gibbs, *Transdisciplinary Theory, Practice and Education*. Springer.
- Lee, J. Y., & Wong, A. S. (2019). Student voice: A preliminary study in the teaching of English literature in secondary schools in the 21st Century in Sabah, Malaysia. *Malaysian Journal of ELT Research (MaJER)*, 17-33.
- Malaysiakini. (2019, January 4). Retrieved from Make education for special needs children inclusive, not integrative: <https://www.malaysiakini.com/news/458869>
- MOE, M. o. (2013). *Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education)*. Putrajaya: Kementerian Pendidikan Malaysia.
- Nicolescu, B. (2018). The Transdisciplinary Evolution of the University Condition for Sustainable Development. In *Transdisciplinary Theory, Practice and Education*. Springer.
- Polat, F., & Helmer, J. (2019). Impelmenting Inclusive Education(In search of the missing piece). In *Ms. How and Me*. Notion Press.