Transdisciplinary Team Approach for Effective Inclusion of Children with Special Needs in Regular Schools: Implications for Online Collaboration

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Abstract: Children with special needs come to regular schools with a wide range of differences which can create a lot of challenges, if the regular education teacher is left to manage the children single handed. Effective inclusion demands transdisciplinary team collaboration with other professionals who are experts in the various fields which these children are experiencing difficulties. This study examines the responsibilities of members of the transdisciplinary team, the hindrances to the formation of a transdisciplinary team and strategies for enhancing a transdisciplinary team approach for effective inclusion. A sample of special education teachers in the primary schools in Enugu State participated in the study. Data was collected using a researcher constructed questionnaire titled, Trans-disciplinary Assessment Questionnaire (TDAQ). Data were analysed using mean and standard deviation. Findings indicate that members of the transdisciplinary team will assess the children's strengths and weaknesses, identify those eligible for special education services and work together to develop and implement an intervention. However, some professionals consider themselves superior to others and there is no coordinating agency to monitor the activities of the various professional bodies. This is a major hindrance to the desired transdisciplinary cooperation. There must be a law legalizing transdisciplinary team approach and an agency coordinating their activities.

Key words: Children, inclusion, regular schools, special needs, transdisciplinary team, legalizing

INTRODUCTION

Inclusive education is a philosophy that supports the education of children with special needs in regular education schools. It is a term which expresses a commitment to educate each child, to the maximum extent appropriate, in the school and classroom attended by their typical peers. Inclusion has been widely implemented in the Western world. The Nigerian government in the National Policy on Education has equally agreed on the inclusion of children with special needs in the general education classroom (Federal Republic of Nigeria, 2004). Inclusion is seen as a means of equalizing educational opportunities for all children irrespective of any form of disability or diversity. It provides children with special needs with appropriate support and services which enable them to interact with their peers without disabilities, develop relationships and also learn together.

Children with special needs come to regular schools with a wide range of differences in their intellectual

abilities, educational achievement, emotional and social competence. Some of these children have multiple disabilities. For instance, a child with cerebral palsy may experience some neuromuscular disorder which may affect walking and fine and gross motor coordination. Another child may have speech defect as well as a learning disability. These diversities and differences can create a lot of difficulty for the regular education teacher, especially, if the teacher is left to manage the children single handed. Reiterating this, Onu, 2004 noted that providing qualitative education for children with special needs in the inclusive classroom comes with multidimensional challenges which the regular classroom teacher alone cannot manage. And if they are not adequately catered for by the teacher, they may be in the regular schools and yet they will be socially excluded, marginalized and underachieve academically. The implication is that it is essential for other professionals who are experts in the various fields which these children are experiencing difficulties collaborate with the regular classroom teacher.

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Collaborative teamwork is one of the critical features which help inclusion to thrive in schools (Florian, 2005). Collaborative team, according to Smith (2007) is a group of personnel with different areas of expertise working together to form a unique multidisciplinary team to meet the needs of diverse students. Such a team might incorporate assistive technologists, counsellors, administrators, school psychologist, special education teacher, speech therapist, physical therapist, physician among others. The services of all these personnel are crucial if the children would receive a comprehensive and wholesome education. Heward (2008) noted that the professionals can form multidisciplinary teams, interdisciplinary teams and transdisciplinary teams. The professionals in the multidisciplinary teamwork independently of each other. They conduct assessment, plan intervention and execute them independent of one another. They tend to splinter the child rather than view the child as a whole. Members of the interdisciplinary team conduct independent discipline assessment, however, they gather together to share information. The transdisciplinary team is the highest level of team involvement and the most difficult to achieve though very rewarding (Heward, 2008). The professionals in this team provide services to persons with special needs in the regular school in a uniform and integrated manner by conducting joint assessment, sharing information and expertise across discipline and select goals and intentions that are discipline free (Friend and Cook, 2007). In this form of collaboration the various professionals work together to design and implement interventions in general education classroom, both the special and general education teachers-teach together in the same classroom and serve together on curriculum planning teams, paraprofessionals work with general education teachers. The professional work together to determine, if a child is eligible for special education services, the team also work together to assess the progress of the child in order to determine, if a child continues to receive special education services.

The members of the transdisciplinary team who are experts in their various professions assess the strengths and weaknesses of the students in the cognitive, affective and psychomotor domains. They collaborate in planning individualized education programs for the child. They meet to monitor the child's progress, plan the child instructional activities, discuss accommodations that need to be made and then coordinate their activities and evaluate their programmes for the child (Smith, 2007). The collaboration of these would ensure the child makes all-round progress and remarkable improvements. And that qualitative education is provided for the child. If

there is no collaboration and communication among these professionals some of the areas the child has need will be neglected and the child will likely not have all-round progress and development. In some cases, the child may also drop out of school and feel that he/she is not progressing.

Unfortunately, however, in spite of the importance of collaboration, experience has shown that in most cases the services provided to children with special needs are left for only the regular teachers. In Nigeria research has shown that there is no collaboration among the various professionals. Each professional sees himself/herself as distinct and different from the other. They work independent of the other, there is no synergy amongst them. Each professional such as the medical personnel, the counsellor, teacher, speech therapist assess the child, plan and administer interventions regardless of the input and ideas from the other professionals. So, there is no coordination, consultation and teaming among the professionals. Thus, Heward (2008) noted these professionals risk the danger of providing services which do not take cognizance of the child. These students with disabilities have consistently performed poorly in their WAEC examinations. This lack of collaboration among professionals could also account for the poor academic performance of children with disabilities in their examination. Gusen and Sambo (2004) in their studies noted issues that hinder interdisciplinary approach to assessment of children with special needs as problem of personality class ie one profession claiming superiority over the others, lack of instrument to carry out the test, every profession seeking confidentiality and the difference in the time it takes each profession to conduct their assessment. They recommend that qualified professionals of proven integrity be involved in the interdisciplinary assessment and in that case conferences be recommended for the professionals to come together and deliberate on the issues concerning a child with special needs.

Transdisciplinary team may consist of teachers who possess moderate to high emotional intelligence profile (Syafrimen *et al.*, 2017). In order to resolve issues related to children's inclusion among bullying students, the transdisciplinary team may adapt confronter model of guidance and counselling which is in form of agreement letter, invitation of parents/guardians and home visitation (Awad and Wekke, 2017). The transdisciplinary team approach may help increase teacher's understanding of hygiene and nutrition education in order to be able to guide the children towards eating balanced diet (Lee, 2017a, b). The implementation of educational psycho-pedagogical platform by transdisciplinary team

may help to improve the quality of education given to students (Dorozhkin *et al.*, 2017). Several models are available for use in creatively solving tasks by pre-kindergarten teacher in early childhood education departments (Kim *et al.*, 2018). Financial incentives and communication style may constitute parts of job satisfaction (Agu *et al.*, 2018) for members of the transdisciplinary team. Therefore, this study examines the responsibilities of members of the transdisciplinary team, the hindrances to the formation of a transdisciplinary team and strategies for enhancing a transdisciplinary team approach for effective inclusion.

Research questions: What are the responsibilities of members of the transdisciplinary team? What are the hindrances to the formation of a transdisciplinary team in the education of children with special needs? What are the strategies for enhancing the transdisciplinary approach for effective inclusion of children with special needs into the inclusive classroom?

MATERIALS AND METHODS

This study adopted a descriptive survey design. Descriptive survey design according to Ali is a type of study which aims at collecting data and describing them in a systematic manner the characteristic features and facts about a given population. The study was carried out in Enugu State. The sample consisted of 150 special education teachers in the primary schools in Enugu State. Data was collected using a researcher-constructed questionnaire titled Trans-Disciplinary Assessment Questionnaire (TDAQ). The instrument consisted of twenty-two items arranged in three clusters. Cluster A deals with the function of the members of the transdisciplinary team, Cluster B deals with the problems that hinder interdisciplinary assessment in school while cluster C deals with strategies to promote interdisciplinary teams in schools. It is structured on a four-point rating scale of strongly agree (4 points) agree (3 points) disagree 2 points and strongly disagree (1 point). The instrument was face validated by three experts. Two in special education and one in measurement and evaluation all from the University of Nigeria, Nsukka. The experts were requested to examine the instrument with regards to the relevance of the items, appropriateness of the contents and representativeness of the various areas of the study. Their comments and corrections made independently were used to modify the instrument. The validated instrument was trial tested using 25 respondents in Ebonyi State. To determine the internal consistency reliability of the instrument, the Cronbach alpha technique was used for

the analysis and the reliability coefficient of 0.77, 0.85 and 0.92 were obtained respectively for the various clusters. Data was collected through direct delivery of the questionnaire to the respondents with the help of two research assistants who were trained by the researcher. Data were analysed using mean and standard deviation. Data were interpreted using real limits of numbers. An item with a mean rating of 3.50-4.00 is strongly agree 2.50- 3.49 is strongly agree, 1.50- 2.49 is disagreed while 0.50- 1.49 is strongly disagree.

RESULTS AND DISCUSSION

The result of the study was presented in Table 1-3 according to the research questions.

Research question 1: What are the responsibilities of members of the transdisciplinary team? What are the responsibilities of members of the multidisciplinary team?

The result in Table 1 shows that the respondents agree that all the items listed above are the responsibilities of the transdisciplinary team. These items have their mean scores ranging from 2.63-3.45 and standard deviation ranging from 0.31-0.64. What are the hindrances to the formation of a multidisciplinary team in the education of children with special needs?The result in Table 2 shows hindrances to a transdisciplinary approach for effective inclusion of learners with special needs in Enugu State. The respondents agreed that all the items are hindrances to transdisciplinary approach for effective inclusion of learners with special needs in Enugu State. The items have mean ratings ranging from 2.53-3.55 with standard deviation ranging from 0.28-1.25. What are the strategies for enhancing the transdisciplinary approach for effective inclusion of children with special needs into the inclusive classroom?

Data on Table 3 indicate that all the items are strategies for enhancing the transdisciplinary approach for effective inclusion of children with special needs in regular schools in Enugu state. The items have mean ratings of 2.58-2.78 with standard deviation ranging from 0.27-1.33.

The data in Table 1 indicate the responsibilities of the transdisciplinary team in the effective inclusion of children with special needs. These responsibilities will ensure that the peculiar needs of the child are met academically, mentally, socially and behaviorally. It will ensure that the child makes all-round progress in school. This will bring about an improved standard of achievement for all pupils irrespective of their differences and diversities. The transdisciplinary collaborative

Table 1: Mean and standard deviation of the respondents on the responsibilities of members of the transdisciplinary team

Responsibilities of members of the multidisciplinary team	X	SD	Dec
An assessment of the child's strengths and weaknesses	2.86	0.63	A
They screen children so as to identify those who are eligible for special education services	2.98	0.59	A
Members of the team work together to develop an individualized education programme in general education classroom	3.07	0.39	A
They work together to implement interventions in general education classrooms	3.45	0.86	A
The team monitors the progress of the child to determine, if the child still needs special education services	2.63	0.53	A
General and special education teacher teach together in the classroom	3.23	0.31	A
They work together to discuss the accommodations the child will need in the class.	2.89	0.64	A

Table 2: The hindrances to a transdisciplinary approach for effective inclusion of learners with special needs in Enugu State

Hindrances to the formation of a transdisciplinary team	X	SD	Dec
Some professionals feel that they will be poorly remunerated after their collaborative services	2.62	0.61	A
Some professionals look down on others and consider themselves superior to others	3.14	0.28	A
Societal non-challant attitude towards persons with special needs	2.97	0.67	A
Lack of experts who will work in the transdisciplinary team	2.53	0.36	A
There is no agency to coordinate the activities of the various professionals	3.55	1.25	SA
There is no government policy enforcing transdisciplinary collaboration	3.53	0.69	SA
The professionals do not see the need to collaborate in providing special education services	2.64	0.47	A
There are no technological tools to carry out such services	2.81	0.38	A

Table 3: Indicate that all the items are strategies

Strategies for enhancing the transdisciplinary approach for effective inclusion of children with special needs	X	SD	Dec
All schools should have a transdisciplinary assessment coordinator	2.76	0.89	A
There must be a law legalizing transdisciplinary assessment for each child	2.69	0.27	A
There must be regular meeting periods when all the members of the team will meet to conduct assessment and design programmes	2.94	1.33	A
All form of professional rivalry should be put behind in the interest of the child	2.66	0.65	A
The government should make fund available for transdisciplinary assessment of special needs children	2.78	0.56	A
There should be capacity building on transdisciplinary assessment approach	2.71	0.61	A
Appropriate professionals should meet to develop Nigerian Standardized test that will be used for assessment	2.58	0.88	A

approach will take responsibility for assessing the child's strengths and weaknesses, identify that those who are eligible for special education services work together to develop and implement intervention programmes in general education classroom and monitor the progress of the child to determine if the child still needs special education services. This will help to evaluate the child, as well as the programme and the output will be used to improve the services given to the child. According to, Galivan-Felton the professionals in this team provide services to persons with special needs in the regular school in a uniform and integrated manner by conducting a joint assessment, sharing information and expertise across discipline and select goals and intentions across disciplines. This will also ensure that the child receives all the necessary support from a professional with great skills and expertise. Results in Table 2 reveal the hindrances to a transdisciplinary approach to inclusive education in Enugu State. The result indicates that some professionals feel that they will be poorly remunerated after their collaborative services, some professionals look down on others and consider themselves superior to others, there is no agency to coordinate the activities of the various professionals and there is no government policy enforcing transdisciplinary collaboration. This result agrees with Gusen and Sambo (2004).

Results in Table 3 revealed the strategies for enhancing the transdisciplinary approach for effective inclusion of children with special needs into the inclusive classroom. The result emphasizes that there must be a law

legalizing transdisciplinary assessment for each. Regular meeting periods where all the members of the team will meet to conduct assessment and designing programmes must be instituted. The government should ensure that funds are made available for transdisciplinary assessment of special needs children. Capacity building should be instituted in transdisciplinary assessment approach, appropriate professionals in the field should meet to develop Nigerian Standardized test that will be used for, assessment, among others. This result is consonance with the arguments of Friend and Cook (2007). In order to enhance transdisciplinary collaboration in inclusive school settings, we suggest the use of online learning platforms such as Researchgate, Facebook, Twitter and WhatsApp among special educators to share ideas and resources for teaching children with special needs. However, policy implementers should be aware that for effectiveness of this online collaboration, the ICT skills need of teachers must be met. Studies have revealed the capacity building needs for personal ICT skills of teachers and that male and female science and mathematics teachers significantly similar in their perceptions of the capacity building needs for both personal and ICT skills for classroom activities (Ugwuanyi *et al.*, 2019).

CONCLUSION

Children with special needs in inclusive classrooms will be served better when professionals in the various fields in which these children are experiencing difficulties

collaborate to provide them with appropriate support services. The services of transdisciplinary team members who will collaborate in assessing the children's strengths and weaknesses, plan individualized education programs, monitor the children's progress, plan instructional activities, discuss accommodations that need to be made and evaluate their programmes cannot be overemphasized. This will enhance the ability of children to learn and optimize their function and participation in an inclusive classroom. Unfortunately, the lack of an agency to coordinate the activities of the various professionals and lack of government policy to enforce transdisciplinary collaboration are barriers to effective inclusion. We recommend that regular teachers alone should not be left to handle children with special needs. Rather professionals should collaborate with the regular classroom teachers to provide the necessary services which the children need for them to benefit maximally in the learning activities in an inclusive classroom.

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