International Journal of Innovation Scientific Research and Review
Vol. 05, Issue, 01, pp.3808-3812, January 2023
Available online at http://www.journalijisr.com
SJIF Impact Factor 4.95

Research Article

ISSN: 2582-6131

TOWARDS A NEW CONCEPTUALIZING OF CASCADE-BASED TRAINING OF TRAINERS FOR LEADERSHIP & COMMUNITY DEVELOPMENT

*** Mohammed Qasserras and Lhoussine Qasserras**

Ibn Tofail Universiy Morocco.

Received 14th November 2022; Accepted 15th December 2022; Published online 22th January 2023

ABSTRACT

The paper aims to investigate multiple meanings and conceptualizations of TOT, particularly with community development and social change programs. In this article, the characteristics of TOT and its types are investigated and the driving forces that determine this training model are discussed. TOT has been regarded as a trustworthy model for teachers/trainers professional development in which the learning process can be more meaningful with good standards of trainers' production and manufacturing. The study investigates the cascade-based TOT model by standing on its opportunities and challenges. Hence, the paper attempts to highlight the concept of TOT that is often seen by development organizations, particularly the ones interested in youth work as the most effective means of building trainers' capacities, adult youth leadership and social change values dissemination.

Keywords: Capacity Building Programs for Trainers, Cascaded–based Training, Community-based Learning, Teacher's Leadership, Professional Development, Training-Of-Trainers, Training-The-Trainer, Transformative Learning for Social Change.

INTRODUCTION

Professional development has obtained a key role in the public and private sector of development organizations with the intention to empower individuals to transfer attitudes that may drive the intended behavior change. Organizations and institutes invest in transformative learning by applying a number of educational training models, one of which if not the most popular, particularly in nongovernmental organizations landscape is Training of Trainer known as TOT Training-Of- Trainers or TTT Train-The-Trainers model (Orfaly, *et al.,* 2005). TTT or TOT has recently been marked as a significant sustainability training intervention in addressing professional development in non formal education, especially in health, youth work and community development. This attention owes to its flexibility and time efficiency in reaching large scale people in a limited time**.** Indeed, nongovernmental organizations along with other institutions interested in humanitarian affairs emerged as the champions of non formal learning implementation, deploying a variety of interventions and spray and pray method to pass their agenda and values to the wider population, particularly those in developing countries and marginalized communities. In brief, the TOT's usefulness which is mainly presented in its mechanism and structure to reach numerous individuals in a short period time made this model termed metaphorically cascade training, chiefly in transformative learning (Karalis, 2016). Hence NGOs and other institutes with humanitarian focus use cascaded-based TOT as an approach to be implemented in situations that necessitate urgent intervention.

CASCADE-BASED TOT MODEL

The term cascade is defined by Oxford dictionary as "flow down in larger amounts" which makes quiet uncomplicated to ascertain the notion of quantity and velocity embedded in cascade structure. Cascade-based training model functions through up-down process which makes the operation of producing and generating trainers go in such a fast pace reaching outnumber of recipients (Cheese, 1986; Hayes, 2000; Hares, 2016). In this respect the cascade-based TOT form is regarded as one of the most practical sustainable education training models for situations requiring urgent intervention through formatting large scales recipients in a short time to cause the intended attitude and behavior change. This training framework operates by transferring the learning content and intervention skills to trainees who become trainers by the condition of transforming the knowledge received in the previous training to new trainees (Baron *et al.,* 2002; Jensen & Baron, 2003). Hence, in cascade configuration, a first group of trainers are trained in a certain subject and the accomplishment of such training offers qualification for the target trainees by guaranteeing them the accreditation to transfer the knowledge already received to the next group of trainees (Cheese, 1986; Hayes, 2000). The process is replicated or copied for another cohort or generation and the process keeps going in this approach until it reaches its target number of receivers (Karalis, 2016).

This copied process is what (McDevitt, 1998) refers to as a "system of dissemination" that ensures what is produced at the top filters down effectively to the base. Kennedy (2005) also confirmed this dissemination by pointing out that a number of selected teachers are often trained in a particular learning content, and they in turn train their colleagues on the same knowledge received in the previous training (Kennedy, 2005). Cascade training in, simple term, means the art or mechanism of prearranged knowledge dissemination through a number of layers or stages aiming at reaching high number of people. Each training course within the cascade model called phase or stage and the content is diffused through the implication of informal learning approaches and activities (Jacobs, 2002). The cascade-based model is sometimes referred to as multiplier approach to training, for its rapid and mathematical dimension in delivering large scale intervention trainings to include massive number of recipients. Cascade consequently posses such a unique geometric sequence in including constant number of trainees in each group (Dichaba & Mokhele, 2012; Ono & Ferreira, 2010; Karalis, 2016)

***Corresponding Author: Qasserras Mohammed,**
Ibn Tofail Universiy Morocco.

Karalis explained the cascade Model this way:

> *…let's assume that we have 20 experts (first cohort - first phase) and each one of them educates 20 trainers, resulting to a total of 400 qualified trainers (second cohort -second phase). These trainers can educate a total of 8.000 trainers (third cohort –third phase). Just in the fourth round of implementation, we can have 160.000 final recipients of the initially designed program or intervention…. (Karalis, 2016)*

History of Cased-based TOT

Investigating the literature, we ascertained that cascade training approach practices were first reported at the industry level with job instruction training programs during the second world (Jacobs, 2002). For example, Plant managers received training by TWI staff on the need for effective technical training in their companies. In turn, these individuals were expected to pass the knowledge to their line managers on the issue, and they in turn helped their supervisors become on-the Job (OTJ) trainers (Jacobs, 2002). Besides, in 1980 a number of organizations like Xeros and Ford embraced this training method (Karalis, 2016). There were also an implementation of cascade model for reaching 3000 managers recipients of the training in six months as well as other 50000 participants' implementation (Chesse, 1986, p. 248). Within the education spectrum, the literature has demonstrated some cascade focused training history in some African and Asian pacific countries. The model has been widely adopted in many African nations including as an approach to enhancing TCPD (Gathumbi *et al.,* 2013). For instance, Namibia invested in a project named INSTANT (In-Service Training and Assistance) for Namibian Teachers (Peacock, 1993). There was also a further step to reform the educational framework with different programs in Botswana; in this context, 1000 teachers received intensive training in two or three day workshops (McDevitt, 1998). South Africa also deployed cascade-based training as a byproduct of educational reforms (Ono & Ferreira, 201; Dichaba & Mokhele, 2012). Moreover, during one of the INSET programmes in Kenya, a two-tier level was implemented with secondary schools while a three-tier one employed in primary schools, according to (Gathumbi *et al.,* 2013). In the same token, some experiences could be illustrated from the Pacific Asia context. In Sri Lanka, the Primary English Language Project (PELP) adopted the cascade method to reach about 6.000 primary school teachers (Hayes, 2000). Bangladesh also invested in a cascade training model through human Rights and Legal Education (HRLE) initiative based on six days workshops (Rafi, 2010).

One of the countries invested in large scale cascade training intervention was Greek (Karalis, 2016) and such interest is due to the unique geographic characteristic the Greek country enjoys**.** The first application of the cascade model in Greece was designed at Hellenic Open University. The total duration of the program was 300 hours, 75 of them in four intensive face to face meetings and the rest 225 corresponding to the study by distance of educational material of about 1000 pages. At the end of the program, the participants were accredited as adult educators for the system of continuing vocational training activities via a specific procedure including a final 20 minutes micro-teaching demonstration. In the first phase of the cascade application, 12 experts in the field of adult education were educated to act as trainers for the next phase, where they educated the first trainers of trainers in groups of 20 (a total of 250 trainers). Those 250 trainers were accredited as trainers of trainers by EKEPIS so as to educate about 10.000 trainers in Greek (Karalis, 2016).

SKILLS AND KNOWLEDGE PROVIDED IN TOT CURRICULUM

TOT is often a participant based method of learning. During TTT, trainees learn how to employ participatory and experiential based learning to pass them to the next cohort. They also get exposed to engaging approaches to presentations as well discussion skills to stimulate active participation of trainees. Role play, drama, music, storytelling, media, educational posters, and local metaphors are included in the cascade curriculum. These techniques create learning situations in which trainees can openly share personal feelings, attitudes and experiences, as well as provide ample opportunities to practice new behaviors and skills (Baron, 2006). The cascade model hence applies experiential based learning methodology which ranges from buzz groups to role play, and debate and the model indeed can serve as a response to the educational requirements and the needs of the target group. The way cascade is structured, the up down process, needs more active participation by trainees as a counterbalance to this hierarchical nature of the mode (Karalis, 2016). In fact, effective TOT as it includes training in technical skills it should also offer teaching methodology based competence, since the capacity to learn technical skills does not automatically translate into the capacity to transfer knowledge to others. Thus there is a need to include some unique mechanisms to fill out the assign task which might comprise skills and attitude like patience, insight, confidence, communication skills, leadership, and self-reflection, including the propensity to give constructive criticism, along with the motivation and ability to help others (Baron, 2006).

DEBATE OVER CASCADE: MERITS AND DEMERITS

Merits

Among the major advantages of this model is the cost-effectiveness. Local trainers so to speak can voluntarily serve the program without the recruitment of experts that might need a lot of budget for the dissemination of the program (Hiner, *et al.,* 2009). Teachers in different countries and in different programs have been used for the strategy of cost effectiveness in TOTs with the aim to reach a wider population. Gilprin (1997) as cited by (Hayes, 2000) argued that the cost effectiveness of the cascade approach is due to the use of existing teachers to train others because it may take longer for countries such as Kenya to be confident in instituting continuous programs that will develop all the teachers professionally; the cascade model provides an easy way-out to address this concern (Bett, 2016). Hence teachers could be reached at once using fewer resources, making the entire programme cost-effective to countries that adopt it. Time efficiency in conducting cascaded-based TOT is an immediate benefit of this mode of transformative learning. The TOT model can be conducted through various layers, while the learning content of the training program can reach a lot of people in a short period of time (Orfaly *et al.,* 2005) particularly for countries that lack the human and the financial resources. As an illustration, some countries like Kenya that often grapple with fewer teachers may find this model more convenient to fulfill the country's specific needs (Bett, 2016).

Demerits

The literature has devoted much concentration to the dilution of information in the cascade model. Most if not all scholars agree upon the dilution of information as the major inherent deficit of such a model. Though cascade possesses such a unique form of system of information dissemination in most in-service training programs, it is still unable to enhance teacher's performance along with the danger

of exposing the content into dilution and misinterpretation (Janse-van *et al.,* 2000). The lack of trainers' soft skills makes this mode of learning unable to save the message/content during the process of dissemination as the information is exposed to different layers. Hayes (2000) similarly pointed out the risk of exposing the learning content into dilution using the cascade based structure. Hayes argued that the continuous tiers of cascade training has potential disadvantage presented in information dilution making it 'less and less understood as the further one goes down the process.' So the main flaw of the implication of this strategy is the distortion that invariably takes place once the training is passed down through various layers. Dishaba & Mokhele (2012) questioned this knowledge dilution claiming that the prime cause of failure of the cascade model of training is the concentration of expertise at the topmost level of the model, allied to a purely transformative mode of training.

McDevitt (1998) argued that controlling the cascade process seems hard, particularly the learning content as being set in continuous motion responding to way transmission of this model. It is operated in such a 'centre-periphery and top-down structure making it hard to respond to the need, particularly at the lowest stages (McDevitt 1998). The second weak spot detected by (McDevitt, 1998) concerning the application of cascade-based model is demonstrated in the distance dimension between the central and the local level. He claimed that if a certain trainee is too far away from the source, they cannot get soaked, that is being covered by sufficient and accurate knowledge as the once imbibed from the source or the top level. He also illustrated that the cascade model does not encourage process and outcomes checking. For example, the evaluation study of three layers cascade style in Uganda displayed pitfalls mainly at the lowest stage. The trainees at the lowest level had not upheld the knowledge or message completely from their own training and some parts were still foggy to them. Thus, they faced some challenges to demonstrate accuracy and confidence while dealing with the training contents (McDevitt 1998).

The evaluation of the grass root layer of cascade model implemented in Botswana indicated that the training was not very useful and fruitless, as much focus was on what is already known. The same study also revealed that the cascade mode was incapable of transferring ideas or causing behavior change as a result of the lack of commitment which is hard to be achieved within cascade structure (McDevitt, 1998). This was also pointed out by (Mezirow, 1991) who claimed that the problem is at the top down structure which does not promote participation and commitment. For Mezirow (1991) a process of justifying or validating communicated ideas is needed in order to transfer new ideas which are perceived and comprehended. Therefore, the explanation of the new ideas which are needed to be transferred into behavior change hardly takes place. Also another default was mentioned by (Dove 1986) and this time at the higher stages; The higher levels often lack experience of primary school teaching which makes it challenging to forecast the needs, especially at the grassroots level, resulting in widening the gap between levels (Dove, 1986). Remarkably, one of the major concerns about the cascade model is embedded in the paucity of information transmission caused by its up down hierarchy personality. Hence, many trainees, even if they have effectively grasped the competencies and skills, they, however, avoid transforming them to their peers in the workforce (Harris 2000). This lack of commitment was further discussed by (Dichaba, 2013) as teachers may be prepared to implement collegiality learning at the centre level but the circumstances and fear of not being able to respond all sorts of questions from them may make the trainee reluctant to act as a multiplier to disseminate the already acquired knowledge to their colleague. Baron (2006) focused more on the dimension of self-confidence as an important factor in implementing cascade. With no self-confidence, trainers can't handle training even if they master the content well. Trainers cascade along with the subject matter knowledge mastery; they need other skills particularly the ones related to personality to ensure the smooth passing of knowledge (Dichaba, 2013; Harris, 2000). Baron (2006) further argued that within the cascade training system, information flows at a remarkable speed which can also be problematic when the information is inaccurate, culturally insensitive, or dangerous. Also, the implementation of cascade based training in developing countries is often confronted with the limited educational and training qualities of local trainers. Plus, 50 to 70% of the TOT recipients are out of mood to deliver training for the second group of trainers (Orfaly, *et al.,* 2005; Hiner, *et al.,* 2009; Makanjuola, *et al.,* 2012) which make this idea feasible. One important cause of this problem is when the training sessions are conducted in a hurry along with the absence of sustained follow up activities which ensure the progress of the correct information or behavior. The story of health workers (Baron, 2006) who received TOT which included giving instructions of a certain number of pills for people with psychological symptoms in the community may illustrate the significance of sustained follow-up check. Consequently, the instructions were misused through this cascade implementation especially in the lower levels. Certainly, the trainer certainly did not train this, but without any follow-up the incorrect information was cascading through the communities. This behavior is of course not what the master trainer taught, but the problem is that the master trainer made no follow-up to guarantee the progress of the correct information or behavior (Baron, 2006). Trainers as a remedy need to assess the methodologies they plan to train and ensure that the timing for the training and follow-up is adequate, to avoid misunderstandings which might be detrimental or even dangerous (Baron, 2006)

What Makes an Effective Cascade?

Efficiency and effectiveness in TTT is all about controlling content from distortion. Makanjuola *et al.,* (2012) provided an example for minimizing the dilution in the TOT model by the use of instruction manuals and specific guidelines. They argued that adopting manuals and guidelines would serve as references for the trainers to be well oriented and transform the content as it is. Hayes (2000) identified five key criteria which are needed in a cascade based approach. First, the training should be experiential-based. Second, the training should be open to reinterpretation by involving flexibility and without ignoring local needs. Third, expertise must be diffused through the system as broadly as possible. Plus, the involvement of stakeholders is vital for training development, particularly during the preparation of training materials. All this can be achieved through effective collaboration among project coordinators, trainers and participants. The last important element according to (Hayes, 2000) is decentralization of responsibilities within the cascade structure in which collaboration, flexibility and responsiveness to the local needs are crucial. Baron (2006) on the other hand emphasized on the selection of trainers, particularly at the top level. Trainers in TOT must possess relevant knowledge, skills and experience. A mastery of the field is necessary by trainers before starting the up down diffusion process. Trainers would be unable to communicate ideas if they themselves still struggle with the content. Baron (2006) further emphasized that even when people are skilful they cannot necessarily train others. People with a full base of knowledge and skills might have difficulty communicating what they master into a plain curriculum pertinent to those they will instruct. Many individuals, even with years of experience, may be skilful but still not easy to train others, since they lack a clear conceptual understanding that explains the reasons behind the use of certain training skills (Baron, 2006).

The role of personality was also emphasized as an important dimension in the trainer's profile, namely in transformative education. Although some TOTs may introduce the participants to the knowledge and competencies to train others, still the element of personality is a key factor in determining competent trainers as it enhances the trainer profile as being confident, outgoing, well organized, mature, compassionate, flexible and more (Baron, 2006).

CONCLUSION

The scholars in brief are aware of the major risk behind the application of cascade-based training model which is presented namely in the dilution of the learning content, associated with the up-down diffusion system. However, a number of scholars tried to set some precautions or conditions for implementing cascade training as a remedy to the potential deficiencies. For example (Hayes, 2000) identified a number of criteria for controlling the feedback from potential dilution that vary from the implementation of experiential learning, understanding trainer needs, involving stockholders along with the personal traits of the trainer. Makanjuola *et al.,* (2012) on the other hand suggested that the development of instruction manuals and specific guidelines may help in controlling the content (Ray, et al. 2012). Baron, (2006); Karalis, (2016) along with the focus on the personal qualities of trainers, they stressed on the trainer's technical competence and the process through which the training is formulated, particularly in the section stage of trainers. The recruiting of confident trainers are critical for the success for the program, chiefly in the first layers of the cascade based TOT (Baron, 2006; Karalis, 2016). Yet, Karalis (2016) for closing this gap, he called for a mixed-method TOT; a combination of face to face training and distant study of TOT educational material. It is obvious that literature is so concerned with addressing the gap of knowledge dilution in cascade-based TOT; however, it is imperative to ask some questions that are meant to address the whole program quality. The trainees no doubt are considered the engine by which this project to be implemented and sustained. Hence, the trainees profile should be well studied which may include their competencies, prior knowledge, teaching or training experiences, culture, needs, and more. Aside from this, it is worth mentioning that most TOTs within community development work mostly use adult youth volunteers to serve the project implementation. In this context, the program is more categorized as a community based project, for it depends on volunteers to accomplish its goals as the budget may not allow for recruiting certified trainers. Thus the first task of the cascade is to look for motivated individuals, particularly adult youth to take part in the project by taking the course first, understand it well and then pass the learning package to a new cohort. So the main challenge for this community project is to find the motivated multipliers to help in sustaining the program. Cascade-based TOT therefore targets primarily multipliers not trainers, for the leading cause of the project is to impel social change. Those multipliers enjoy a high spirit of activism, citizenship and community commitment. Though those players may not enjoy any pedagogical or content knowledge, they still owe the fortitude needed in social change initiatives implementation, namely activism knowledge or activism awareness. In such community development educational projects, the activism knowledge is the most imperative element, identified as the foundational knowledge for building further types of knowledge useful for the program multipliers to accomplish this cause. Thus efforts towards minimizing knowledge dilution necessitate first a deep understanding of the cascade-based TOT model as a concept and its in-depth implications. The cascade-based TOT is not based on a professional development model but a pure community-based social work with a transformative learning framework. Thus the TOT is not a professional development project or in-service training but a community-based project and resilience building initiative, aspired to cause positive change with a certain community.

It is also noteworthy that not all TOTs are operated through various layers format, with the literary sense of cascade; sometimes just one or two layers format may serve the objective of some TOTs. There is a variety of TOT programs with no up-down nature preordained to reach numerous participants. They aspire to empower a group of trainees, teachers, health workers or any other processionals for more quality assurance at the workplace with no intention of learning outcomes through wild dissemination. Such types of training indeed are more competence-based training and have nothing to do with the up-down process to diffuse learning content to a wider population to cause projected attitude or behavior change within a certain community. If there is only one layer or even two layers oriented training, the dilution of knowledge would not be a main concern as this challenge is often raised at the lower levels as most scholars argued.

Hence, the cascade-based TOT implementation in literature does not well define this model of training. Sometimes the model is conceived as in-service training and sometimes as pre-service training. Considering this TOT format as an in-service training makes us implicitly assume that TOT participants already received pre-service training as a precondition to start a certain teaching job as a teacher or trainer, particularly in education. But surprisingly various TOTs programs are offered to trainees who have never been exposed to any pedagogical knowledge and sometimes without any basic knowledge of the subject matter which is the content knowledge needed to be diffused to the next cohort, without talking into consideration the pedagogical content knowledge of the subject matter that makes the content transmission much effective. The first stage of this model which is 'trainees selection' makes TOT as a concept merely confusing and not plainly defined and conceptualized, with no clear structure, objectives and assessments as its foundation stage is based only on 'bricolage' and not well definite goals. Also the literature does not highlight the notion of adult learning that the participant needs to possess to perform the task needed. Adult learning dimension is almost absent in the literature, except in (Baron 2006)'s work which highlighted the tips for having effective TOT without addressing the significance of this element in minimizing information dilution. The cascade-based TOT should be designed with a holistic approach that includes adult learning, content knowledge, Peer To Peer learning along with content pedagogy to ensure a quality transformation. This is an important step to consider for a journey of reforms meant to minimize information dilution in this craft of professional development, the main concern of scholars. Indeed, in cascade-based TO, it would be off context to talk about pre or in-service training as this project does not often target professionals but more youth volunteers and paraprofessionals. It is a community based project and a capacity building program within non formal education that needs unique design, curriculum, implementation and measurement.

In a nutshell, the missing point in the current literature including development and education for inclusion programs literature is the absence of ICT as potential remedy to cope with this content dilution dilemma and support the multipliers needs, expect in (Karalis, 2016)'s work that talked about hybrid-based cascade TOT to guide the trainers to stay well-oriented about the content. Integrating ICT in this mode of learning would help in assuring more quality for the training that combines pedagogy and content knowledge for its multipliers. Unfortunately most institutes investing in non-formal learning are outmoded to adopt mixed method TOT implementation though it can solve different learning problems and boost participants' engagement.

REFERENCES

Baron, N. (2006). The 'TOT': A Global Approach for the Training of Trainers for Psychosocial and Mental Health Interventions in Countries Affected by War, Violence and Natural Disasters. Emmitsburg, MD, USA: National Emergency Training Center.

Bett, H. K. (2016). The Cascade Model of Teachers' Continuing Professional Development in Kenya: A time for Change?. Cogent Education, 3(1), 1139439.

Cheese, J. (1986). Cascading the Training, Innovation in Education and Training International, 23(3), 248-252

Dichaba, M. M., & Mokhele, M. L. (2012). Does the Cascade Model Work for Teacher Training? Analysis of Teachers' Experiences. International Journal of Educational Sciences, 4(3), 249-254.

Dove, L. A. (1986), Teachers and Teacher Education in Developing Countries. New Hampshire: Croom Helm

Gathumbi, A. W., Mungai, N. J., & Hintze, D. L. (2013). Towards comprehensive professional development of teachers: The case of Kenya. International Journal of Process Education, 5, 3–14.

Gilpin, A. 1997. 'Cascade training: sustainability or dilution?' in I. McGrath (ed.) Learning to Train: Perspectives on the Development of Language Teacher Trainers. Hemel Hempstead: Prentice Hall

Hayes, D. (2000). Cascade Training and Teachers' Professional Development. ELT Journal, 54(2), 135- 145.

Hiner, C. A., Mandel, B. G., Weaver, M. R., Bruce, D., McLaughlin, R., & Anderson, J. (2009). Effectiveness of a Training-of-Trainers Model in a HIV Counseling and Testing Program in the Caribbean Region. Human Resources for Health, 7, [11]. DOI: 10.1186/1478-4491-7-11

Jacobs, R. L. (2002). Institutionalizing organizational change through cascade training. Journal of European Industrial Training, 26 (2/3/4), 177-182.

Janse van Rensburg, E. (2001). They Say Size doesn't Matter…": Criteria for Judging the Validity of Knowledge Claims in Research. Research Decisions for the People-Environment-Education Interface.

Jansen, J. D., & Middlewood, D. (2003). From policy to action: Issues of curriculum management at school level. Managing the Curriculum in South African School. London: Commonwealth Secretariat, 49-65.

Jensen, S. B., & Baron, N. (2003). In: R. Oerner, U. Schyder (Eds.), Reconstructing early intervention after trauma (236-46). UK: Oxford Press.

Johnson, S. M., & Donaldson, M. L. (2007). Overcoming the obstacles to leadership. Educational leadership, 65(1), 8-13.

Karalis, T. (2016). Cascade Approach to Training: Theoretical Issues and Practical Applications in Non-formal Education. Journal of Education and Social Policy, 3(2), 104-108.

Kennedy, A. (2005). Models of continuing professional development: A framework for analysis. Journal of In- Service Education, 31, 235–250. http://dx.doi.org/10.1080/13674580500200358

Makanjuola, V., Doku, V., Jenkins, R., Gureje, O. (2012). Monitoring and evaluation of the activities of trainees in the 'training of trainers' workshop at Ibadan, south west-Nigeria. Mental Health in Family Medicine, 9, 25–32.

McDevitt, D. (1998). How effective is the cascade as a method for disseminating ideas? A case study in Botswana. International Journal of Educational Development, 18(5), 425-428.

Mezirow, J. (1991). Transformative dimensions of adult learning. Jossey-Bass, 350 Sansome Street, San Francisco, CA 94104-1310.

Ono, Y., & Ferreira, J. (2010). A case study of continuing teacher professional development through lesson study in South Africa. South African Journal of Education, 30, 59-74.

Orfaly, R. A., Frances, J. C., Campbell, P., Whittemore, B. J., Joly, B., & Koh, H. (2005). Train-the trainer as an educational model in public health preparedness. Journal of Public Health Management Practice, 11, 123–127

Rafi, M. (2010). Evaluating training cascade: A methodology and case study. Educational Research and Reviews, 5(2), 64-77

****