# For Global Collaboration of Reflective Lesson Study and Professional Learning Communities of Teachers

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In this changing and unstable state of global settings, there is no ready-made right solution to be taught. If we are stacked traditional obedient learner mode, this situation is far beyond our control. But our competency cannot be developed, the enhancement of free learning will inevitably fall into the free choice in the limit of our option which we can see in the today's situation. We need grow the mode of reflective learner mode.

Even if we are in the situation without no readymade right solution, we can learn by doing for the situation. We can approach to the situation with inquiring, practice, and reflection cycles. In this cycles, we try inquiry the situation, try tentative approach, listen carefully the back-talk against it, and reflective think -and-reconstruct the next reconstructive approach. And we also can learn other practitioners challenge and reflection in our shared situation. In these learning process, we the collaborating, and reflective co-inquiry, communication cycles. And also, this is the truly authentic learning for every participants.

Our situation is awful for traditional passive learners, but for co-inquires this situation is the occasion for challenge to new potential of individuals and societies. But all we know, transformation of the basic mode of learning is so difficult. The mode of learning rooted in identities of the individuals, generational cycles, and culture

of communities. We can not change the basic mode of learning by teaching or transmission mode, which is traditional learning mode themselves. So we need to realize an immediate, rapid change is impossible and challenge long-span gradual try-error-reflection approach. For this long-span gradual approaches, we need the base communities for sustaining for each others patient reflective practice. Our DPDT is to be this sustaining communities for challenges to new learning mode.

Since 2007, Schools, education board, and University Collaboration for cultivating communities of 21<sup>st</sup> century learning has been challenging, reflecting, reconstructing together. On the base of these endeavor, the new challenge for international collaboration has been started

#### **Newsletter Contents**

DPDT's International Efforts (1)

JICA 2016 Knowledge Co-Creation Program (2)

Knowledge Co-Creation Participant Introductions (3)

Knowledge Co-Creation Program Closing Address (13)

Reflections from JICA 2016 (14)

Follow Up Reflection: Lesson Study in Ikot Ekpene (18)

The World Meets Fukui in Three Days: Reactions on

the First International Fukui Roundtable (21)

WALS 2016 Conference (27)

OECD ISN Project (27)

Continuing International Collaborations (28)

since last year. JICA-DPDT Knowledge Co-Creation Program for improvement of quality of education through "Lesson Study" in Africa, and the international Fukui Round Tables are the first cycle of our global collaboration.

In these cycles, we learned the process of each other's experiences which have different background, but also have common agenda through small group sessions and co-inquiry session of school-based reflective lesson studies.

I thought, as a matter of fact, there would be the cultural gap, and communication of educational practice would face the difficulty from this gaps.

But our colleagues from Africa and other areas were truly the actual reflective practitioners and

inquires. And active and thoughtful learning of students, teachers collaborative professional practices, and culture of learning in schools fascinated our colleges. We need to reflect and learn these miracle encounter in Fukui and try next co-inquiry cycles for wider settings.

We know the reconstruction of the learning culture never happen immediately in one isolated culture. If it happen, the process will based on the long sustainable endeavor of generations and cross-boundary collaboration. Our joint challenge will be the part of this endeavors and collaboration for creating inquiry-based learning for all of our century.

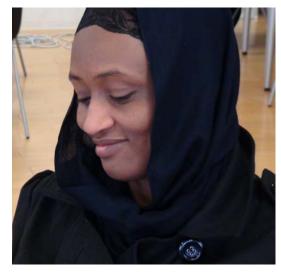
## JICA 2016 PROGRAM:

Knowledge Co-Creation Program Improvement of Quality of Education Through "Lesson Study" in Africa

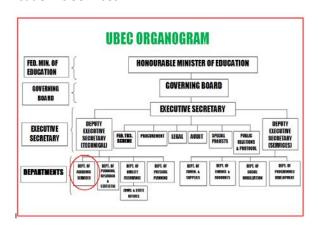


The JICA 2016 Knowledge Co-Creation Program: Improvement of Quality of Education Through "Lesson Study" in Africa was held on November 8<sup>th</sup> to November 25, 2016 at the University of Fukui Department of Professional Development of Teachers. Seven participants from 4 different African countries participated in this program. The program was an intensive three-week training focused on inquiry-based learning and reflective lesson study. This newsletter includes a self-introduction and short reflection from each of the participants, as well as the closing address by Tomoki Nitta, Director General of JICA Hokuriku Branch Office, and the impressions and reflections from Elizabeth Hartmann.

## Aisha Aminu Bamanga Nigeria



My Name is Aisha Aminu Bamanga, from Nigeria West Africa. After my graduation at the Federal University of Tecchnology Yola Adamawa State, I served in a Federal Government Girls' College Bauchi for 1 year, and then got a Job in the same school, i taught Agriculture and Economics for 5 years, because of the challenges I had in teaching such as not been patience with students, so I decided to switch to an office work as an education manager and field officer at the Universal Basic Education Commission (UBEC), where I am as a Senior Academic Planning Officer in the Department of Academic Services.



The Educational responsibilities of the Federal Government are carried out through various agencies which include the Federal Ministry of Education (FME). However; there are Agencies and parastatals through which the Federal and State Ministries of Education carry out their oversight functions on education. For the basic education sub-sector, the Universal Basic Education Commission (UBEC) at the National and State Universal Basic Education Boards (SUBEBs) at the State levels, implement its provision. That is

the sub-sector i belong to as education managers and policy implementers. Our **vision** is to be a world class education intervention and regulatory agency for the promotion of uniform, qualitative and functional basic education in Nigeria. **Mission:** To operate as an intervention, coordinating and monitoring Agency to progressively improve the capacity of states, local Government Agencies and communities in the provision of unfettered access to high qualitative basic education in Nigeria.

#### Objectives are to:

- Ensure unfettered access to nine (9) years of formal basic education.
- The provision of free, Universal Basic Education for every Nigerian child of school going age.
- Reducing drastically the incidence of drop-out from the formal school system, through improved relevance, quality and efficiency
- Ensuring the acquisition of appropriate levels of literacy, numeracy, manipulative, communicative and life skills as well as the ethical, moral and civic values needed for laying a solid foundation for life-long learning.

#### My job description is to:

- Analyze Action Plans on Teacher Professional Development trainings submitted by SUBEBs.
- Monitor the Conduct of Teacher Professional Development trainings.
- Review Staff and State reports based on established modalities for Teacher Professional Development trainings.
- Analyze Training Institutions' reports on Teacher Professional Development trainings.
- Coordinate meetings between UBEC and SUBEBs on Teacher Professional Development trainings.
- Coordinate meetings between UBEC and International Development Partners e.g. JICA, ESSPIN, JOLLY FUTURES, BRITISH COUNCIL etc. on Teacher Professional Development trainings in collaboration with Department of Social Mobilization and Special Projects Unit

Teaching is both interesting and challenging as it requires the use of knowledge, skills and experience for effective delivery of quality lessons. As a teacher, I have very interesting experiences especially dealing with students, setting the tone for effective classroom delivery and engaging with key actors within the school community for the improvement of teaching.

Generally and following deliberate and systematic engagements with students, professional colleagues, school administrators and educational planners, I have realized that the society, nature and quality of educational inputs are the prime determinants of educational outcomes. However, in my teaching environment and society, entirety of educational outcomes is perceived to be a function primarily of what the teacher does. Society is hardly willing to consider the need to create the enabling environment for the best teaching and is also not determined to make the least standard investments for education and deployment of contemporary and excellent classroom delivery methods.

Some of the important experiences that I have had in my routine activities in the field of teaching are as follows:

- Teaching overcrowded classes with inadequate seats for the students;
- Teaching with improvised materials that had to be prepared by the teacher;
- Sharing experiences with colleagues on how to prepare lesson plans and effectively implement them within stipulated time frame;
- Organizing in-service training for teacher of basic education as an educational administrator;
- Monitoring and evaluating trainings conducted for teachers as an educational administrator;
- Monitoring and evaluating trainings conducted for teachers;
- Carrying out impact assessment of the trainings conducted.
- Initiating contacts with Parents/Teacher platforms towards providing alternative community based support structures to alleviate shortage of teachers
- Role-modeling and encouraging early student interest in education/teaching as a life-long career.

These experiences have helped in re-shaping my perspective on the values of education and the

important role that the teacher has to play if educational targets have to be met. Teaching abnormal circumstances under very highlighted the prime importance of innovativeness and creativity on the part of the teacher in and outside the classroom setting. Experience in this regard has impressed on me that education reforms should focus on the teacher's role as being central in the education process. This is because the teacher stands in a most advantaged position to manage the inadequacies caused by the insufficiency of other critical inputs. However, experience has taught me that the teacher can effectively perform this function if he/she is competent and professionally groomed.

Coming to Japan especially in Fukui prefecture changed my perspective, thinking and way of teaching learning. Teaching learning can be easy and enjoyable as you wants it to be If only you use the right method of teaching.

The interesting thing I find with lesson study is their methodology, i.e. way of teaching. They are not using teacher centred but rather learner centred which I believe is the best way of teaching. The teacher allows the learners to actively participate in the class and even set their questions which improve the learners thinking not like my country which they use teacher centred approach i.e. lecture method. As i observed in the classes, the approach teachers are using and the learning activities offered the students an opportunity to be actively engaged in dialogue with their group members and the teachers. Their lessons are designed to motivate and cultivate the student's active participation and understanding.

From the lessons i observed and the discussions made with teachers, contributed a lot to my understanding of the inquiry based learning approach in the teaching and learning process and i have gained skills for improving and to contribute to the improvement of the skills of our teachers in my country in using the appropriate teaching strategy and questioning techniques which will assist them in interacting with learners during their lessons, lesson study approaches.

My expectation from JICA was that to:

- Build my capacity for effective management of in-service training of teachers and managers of education
- Equip me with requisite skills for initiating, planning and coordinating the

implementation, monitoring and evaluation of lesson study in the Nigerian education sector

- Share experiences, best practices and success stories on INSET management with participants and experts from Japan and other countries especially on lesson study training.
- The training should inculcate skills on how to organize effective Lesson Study. As a staff in charge of organizing In-set for teachers and education managers at the basic education level, knowledge in organizing effective lesson study will enhance my performance and competence in the discharge of my duties.

What i seen/learnt from Japan most especially in Fukui is that all the teachers have the same method of teaching and learning i.e. they allow the learners to think and actively participate in the class activities. Teachers use Inquiry based learning approach, were students are engaged in inquiry about openended problems and then teachers are expected to jerk the big ideas out of the collective ideas generated by the class. In an inquiry lesson, the teacher does not give the students the answer directly. Rather, the teacher uses questions and prompts to guide student's thinking towards the concept and help the students really visualize the problem. Allowing the students to arrive at the conclusion through their own problem-solving strategies. This requires the teacher to understand the concepts very well, and to also have a list of ways in which to solve the problem at hand. This is because the different processes the students use dictate the questions to be asked. So I can say JICA/Fukui University have touched in expectations in one way or the other.

## Ermias Chufamo Beshir Ethiopia



I am Ermias Chufamo Beshir. I work for the national Ministry of Education of Ethiopia, Math and Science Education Improvement Center as a Math National Trainer since Sep 2010.

Before I entered in my current office, I worked as government Primary and secondary schools Math teacher for 16 Years. The lessons of my schools were teacher-centred, and student's participation was limited and their learning tends to be a passive way. There was teacher's skill gap, such as in teaching methods, facilitation, communication, utilization of teaching and learning aids, lesson planning and assessment, in order to make "active learning" in lessons. Therefore, in order to realize

and promote "active learning" in our classrooms, the intervention should be provided for all these areas as a continuous form of training, by employing lesson study approach.

#### **Background Information**

Ethiopia envisions transforming into middle income country and being industrialized by the year 2025. For that reason, it has become mandatory for the education system to manifest overall improvement in sciences, mathematics, engineering and technology (MoFED, 2010). However, looking at the current performance of students in mathematics and science (M&S) subjects in our schools, the vision to be industrialized is in doubt. The National Learning Assessment reveals that the performance of students in these subjects has been unsatisfactory (NOE, 2008a, NOE, 2008b).

In response to this situation, the Government of Ethiopia through MOE, and the Government of Japan through Japan International Cooperation Agency (JICA) have been working jointly on a project titled National Project for Strengthening Mathematics and Science Education in Ethiopia (SMASEE from March 2011 to Jun 2014), currently it is a National Programme under MOE, and a Project titled Learning Assessment on Math and Science Education (LAMS) since March 2014.

The Projects aimed at improving Mathematics and Science education in Ethiopia through teacher In-

Service Education and Training (INSET). It also intends to establish a model of INSET system for Grade 7 and 8 M&S teachers.

The goals, purpose and expected Outputs of Projects are indicated in the Project Design Matrix (PDM) of the Projects. To realize its goals, SMASEE Project developed a one-week three-cycle INSET at National and Regional level over three years (2011–2014). Based on the needs identified by baseline survey, respective theme was also decided for each of the three-year training..

Major achievements of the project are:

- Implementation body, at National and Regional levels are established and became functional.
- 2. National and regional INSET centres are established and equipped,
- Training contents and training modules were developed by Ethiopian human resources.
- 4. human resources were developed.
- INSET M&E instruments developed by the Project

	1 st 1 cycle	224 RTs (82% of target)
National INET	2 cycle	270 RTs (99% of target)
	3 cycle	249 RTs (92% of target)
	1 st 1 cycle	1,937 KTs (100% of target)
Regional INSETs	2 cycle	1,847 KTs (95% of target)
	3 cycle	1,040 KTs (54% of target)

Objectively Verifiable Indicators to assess level of trainees' capacity development	Achievement						
The ability of RTs and KTs to provide INSET are enhanced in: Trainees' Capacity Index, obtained on a scale of 1 < x	1" 0		cycle	rcle 2 <sup>nd</sup> cycle		3" cycle	
	Trainers (RTs)' Capacity Index	32		37		43	
	Trainees (KTs)' Capacity Index	3.5		36		4.4	
< 5 with $x \ge 3.5$ as an	RTs' Attitude Toward Mathematic s& Science Index	Pre	Post	Pre	Post	Pre	Post
acceptable mean, and     Attitude toward Mathematics and Science Index, obtained		29	3.4	31	3.7	3.8	42
on a scale of 1 < x	KTs' Attitude Toward Mathematics & Science Index	Pre	Post	Pre	Post	Pre	Post
< 5 with x ≥ 3.5 as an acceptable mean.		3.0	34	31	38	4.0	4.3
The ability of KTs in three target Regions will improve in:	Lesson Observation Index	1" cycle		2 <sup>nd</sup> cycle		3" cycle	
lesson Observation Index, obtained on a scale of 1 < x < 5 with x ≥ 3.4  → Note that the second of the secon		27		30		35	
as acceptable mean, and • Pupil Participation Index, obtained on a scale of 1 < x < 5 with x ≥ 3.4 as acceptable.	Pupil Participation Index	35		36		36	

	Cycle 1	Cycle 1 Cycle 2 Cycle			
objective	Mathematics and Science (MSd	S) lessons throUgh effective less	tive learning leasons" in Gr. 7 & 8 son planning. Use of appropriate lective Use of teaching and learning		
	Lesson planning and teaching methodology for "active learning" in MSS lessons.	Effective Use of T&L ModUles, facilitation and commUnication skills for active learning.	Maximize each atUdent's participation in M&S sUbjects.		
FoeUs / emphasi		Use of TSd. materials     Facilitation skills     CommUnication skills	Active learning methods     Accessment skills for stildent learning Improvisation and Use of T&L materials		

The theme of first year INSET was "Lesson planning and teaching methodology for active learning in mathematics and science lessons." In order to address teachers" practices in classrooms and promote "active learning" in M&S lessons, in

2011 SMASEE-INSET program introduced Lesson Study approach as a part of in-service teacher training

Focusing on the theme of first year INSET of SMASEE Project, particularly on the Lesson Study approach, an assessment was made to determine the project's merit and its worth in strengthening the teaching and learning of Mathematics and Science lessons in primary schools of the Project target area.

Study findings /MSIC Follow up survey Reports/ indicated that teachers found Lesson Study to have some impact on their teaching by improving their ability to match instructional strategies to students' learning needs. However, the study has revealed that the Continuous Professional Development (CPD) program is inactive in most this hinders the schools and smooth implementation of Lesson Study. What is more, the amount of time required for teachers to practice in Lesson Study, scheduling time to meet as a group, lack of administrative support and the lack of complete understanding of the Lesson Study process were identified as the major challenging factors for sustainable practice of Lesson Study in our schools. Support for professional development, flexibility in scheduling and a commitment to change will help lesson study take hold.

Efforts also need to be made to harmonize the lesson study activities with the existing CPD framework at schools.

#### The CPD Framework of Ethiopia

As stated in the "Continuous Professional Development for Primary and Secondary School Teachers, Leaders and Supervisors in Ethiopia – The Framework, the overall objective of CPD for Ethiopia is to raise the achievement of students in Ethiopian schools(MoE, 2009:15). The Framework provides the aim of CPD as: "The aim of Continuous Professional Development is to improve the performance of teachers in the classroom in order to raise student achievement and learning. It is a career-long process of improving knowledge, skills and attitudes, cantered on the local context and particularly classroom practice. (MoE, 2009:16)

According to MOE (2009) all teachers must be actively engaged in:

- 1. Their own learning process,
- 2. Working with their colleagues,

- 3. Identifying their own needs and
- 4. The wide range of activities, formal and informal, that will bring about improvement of their own practice and the practice of others.

In Ethiopia, Continuous Professional Development can be placed into two categories: updating and upgrading (MOE 2009).

- Updating is a continuous process in which every professional teacher participates during their career as a teacher. It focuses on subject knowledge and pedagogy and improves classroom practice.
- 2. Upgrading, on the other hand refers to the process by which teachers can choose to participate in additional study outside their regular work as a teacher at appropriate times in their career, for example, convert a certificate to a diploma, a diploma to a first degree, or a first degree to a master's degree.

According to MoE (2009) following pre-service and induction professional training, each Ethiopian teacher and instructor has professional, personal and civic responsibility to undertake continuous Professional development through his or her career. Each school teacher must take part in planned CPD activities for a minimum of sixty hours each year. These hours should be used flexibly to address the various CPD priorities which impact upon the work of the individual teacher or institution.

The resources to support the CPD come under human resources and material resources (MoE, 2009). Human resources include professional resource at the institution level and external support. Committed and supportive colleagues are the most powerful and accessible resources at the institution level. External supports for CPD include the local and regional educational authorities such as the WEOs, ZEOs, REBs which have a number of supervisors and educational experts. The institution organizing the CPD can ask for the support of an experienced and knowledgeable expert or organization. Other government organizations, for example the Ministry of Education and several national and international NGOs such as VSO, IFESH, USAID, UNICEF, and JICA etc. have the capacity and experience to provide expert support from individuals or teams (MoE, 2009:28).

#### **Challenges of CPD in Ethiopia**

According to MoE (2009) the challenges encountered in CPD in Ethiopia include:

- 1. Absence or inadequacy of structure of cpd in most schools,
- 2. Lack of adequate training for CRCs (cluster resource centers) to run cpd activities,
- 3. Failure to synchronize the career structure and the cpd values and activities,
- high turn of cpd facilitators over, time constraints on teachers and school leaders.
- lack of minimum resources required to run cpd and lack of systematic coordination between the education bureaus.

In order to overcome these challenges and for sustaining continuous professional development, the ESDP IV suggests the implementation of need based CPD program (specific to content and subject matter methodology in all schools (MoE,2010). The application of Lesson Study approach to the CPD framework, therefore, may be an apt strategy to sustain the CPD implementations in our schools.

## The CPD Framework versus the Lesson Study approach

From SMASEE Project, the protracted version of the Lesson Study approach with the three basic phases (Plan, Do/Implement and see/Evaluate) is suggested to implement training (SMASEE 1st Year INSET: Session 4).

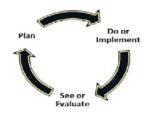


Illustration 2: The Lesson Study Cycle
Source: Based on SMASEE-INSET doc

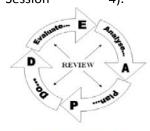


Illustration 3: The CPD Cycle
Source: MoE (2009:23)

## Eva Kabayonga Kagimu Uganda, Gayaza High School



I am an experienced, inspirational and highly motivated teacher of Chemistry and Biology currently teaching in Gayaza High School, an only girls' secondary school (age 13-18years) in Uganda. I have taught Biology and Chemistry in Uganda for eighteen years now. I am a head of the Biology department in my school, a patron of the science club and a class teacher. I am a senior assessor and evaluator of the national examination.

I have taught in five different schools in Uganda. One of these is a day school while the rest are boarding schools. Apart from Gayaza High School, the rest are mixed schools.

Throughout my experience as a teacher in secondary school I have mentored and guided learners as well as simplified scientific concepts to ensure that they not only stay interested in the subject but also pursue courses related to it.

As a seasoned teacher I have interacted with students from both rural and urban areas in Uganda and have come face to face with the challenges of teaching science subjects in Uganda. These range from poor attitude of both learners and teachers towards science to poor provision and utilisation of science teaching aids.

The Ugandan education system is exam oriented so a number of teachers have not yet seen the value of lesson study. Often such teachers do not have time for lesson study they thus concentrate on drilling students for purposes of passing exams ultimately affecting the quality of the content delivered and destroying the interest of the learners.

My participation in the Knowledge- Co- Creation Program B (improvement of quality of education through lesson study) in Japan has positively impacted on me.

Building and sustaining communities of learning is a very important tool in the Continuous Professional Development of teachers. Within these communities teachers have an opportunity to share pedagogical skills and experiences and also simplify and demystify seemingly hard concepts. This leads to the delivery of more interesting lessons in which the students are actively involved and thus improves the attitude of the students and teachers towards learning.

Some parts of Uganda are already carrying out lesson study in schools but these are only a few and not all teachers in these schools are on board.

The open lesson study sessions I have observed in Fukui Prefecture have shone a bright light on the future of education in Uganda because it is evident that open lesson study can be used to improve the teaching of all subjects and not just science and math.

As a participant in this KCCP I am convinced that it is not only my duty to support the systems of lesson study in my country but also set a good example of this in my practice. I will utilize the already existing structures of SESEMAT to disseminate information on sustaining lesson study cycles. With the knowledge acquired I intend to strengthen lesson study groups in my school and eventually organize an open lesson study session in which teachers from at least five neighboring schools will attend and we shall share ideas.

I am fully aware that organization and implementation of an open lesson study session requires a great input of time and resources from the host school and the visiting teachers but I know that its benefits outweigh its challenges so I am prepared to forge a way forward. Equipped with the skills I have acquired in reflection, inquiry, improvisation and the enthusiasm I have gained, I believe that I am ready to cultivate communities of professional learning through sustainable lesson study cycles in Uganda.

## Kahsay Hadera Gebrecirstos Ethiopia



Education is important in life because it gives people the skills and tools they need to navigate the world. Without education, people would not be able to read, write, calculate or communicate; they would also not be able to perform jobs competently, accurately and safely. Education also teaches people about the world in which they including information about history, philosophy and culture. Education is a vital human right and plays a key role in human, social, and economic development. Education reduces poverty, boosts economic growth and increases income. It increases a person's chances of having a healthy life, reduces maternal deaths, and combats diseases such as HIV and AIDS. Education can promote gender equality, reduce child marriage, and promote peace. Once children are in school, the next challenge is to ensure that they are learning to read, write and count, and acquire the skills they will need to become productive members of society. Good teachers are essential to solving the global learning crisis and closing the gap between poor and good quality education. Therefore, it is vital that all children have teachers that are well-trained, motivated, are able to identify weak learners, and are supported by wellmanaged education systems. In sum, education is one of the most important investments a country can make in its people and its future.

Hi, my name is Kahsay Hadera Gebrecirstos from Ethiopia and has been enrolled in the improvement of quality of education through lesson study program at University of Fukui in the coordination of JICA since November 26/11/2016

for 3 weeks. I have been teaching in elementary schools for 5years in Chercher, Hawzen and Tsigerda and also in secondary schools for more than 6 years in Amara Saint, Edagahamus and Agazi located in the south and north part of Ethiopia. Starting April 2007 until know I am working in education offices as experts and in different positions of in service training programs.

I did my graduate studies in BSC biology with in the minor course of chemistry in Ethiopia, Addis Ababa University and my second degree is in Educational policy and planning in the same university. Besides my first and second degree I have get different short trainings from day 5-21 days concerning the quality of education and professional development of teachers and school leaderships. My current task is training design, coordinating, cascading, providing, monitoring and evaluation.

Why I am interested specifically about teachers and school leadership's development program is in order to educate students to learn, Teachers also have to become a lifelong learners. My experience as educational profession the teachers and school leaderships based on the mission and objective of the organization the ability to learn, UN-learn and RE-learn is important to cultivate citizens for life and society is important. Realizing that the teachers and school leaderships overwhelmed with the paper work requirements, the good system of professional development is better necessity.

The same reason also brought me to Japan to experience the teacher and school leadership development program is the improvement of quality education through lesson study. Even though context and culture are different, the experience is why, how and what the inquiry learning process involved situationally in different cycles and discussion methods. What interesting is the University of Fukui is a reflective style of training and the attached schools methods of teaching and lesson reflection based on lesson study and the culture of society in relation to discipline is similar.

I am interested more in about the lesson study process and considering how to be applied on the behalf of continuous professional development program to enhance active learning and students learning growth in Ethiopia.

Thank you to the JICA, University Fukui and all the Experience sharing schools.

## Charles Ndaziona Maonga Malawi



I am Charles Ndaziona Maonga from Malawi. I am working in the Ministry of Education Science and Technology in the Department of Teacher Education and Development as a National Trainer of Mathematics. I have taught Mathematics at Secondary School for eighteen years. In my teaching experience, I have been a Teacher (6 yrs), Senior Teacher (9 yrs), Head teacher (3yrs).

As a national trainer my core duties are planning and organizing in-service trainings for secondary school teachers, developing write ups for inservice trainings, facilitating during national inservice trainings, supervising division trainers and teachers' lessons and conducting monitoring and evaluation of the implementation of learner centred teaching and learning approaches in secondary schools based on Activity Student Experiment Improvisation (ASEI) and Plan Do See and Improve (PDSI) principles.

During lesson supervision, the common challenges teachers mention for failing to implement learner centred teaching approaches despite being trained in the same. Learner centred approaches are the teaching which actively involve learners. They mentions issues like students negative towards mathematics and science, work load is too big, pressure to finish the syllabus so that learners sit for national examinations, in adequate teaching and learning materials, in adequate qualified teachers, large classes and in adequate number of in-service trainings for teachers, which are usually conducted once per year under SMASSE program which was started by JICA as project but now running as a government sponsored program with technical support from JICA). **SMASSE** stand for **S**trengthening Mathematics and Science in Secondary Education.

It is a program which organizes in-service trainings for Mathematics and Science teachers country wide for their professional development. Teachers in my country are still struggling to deliver student centred lessons (lessons which actively engage learners in meaningful activities) despite the effort we are putting to train teachers on the same.

My hope and expectation was that the training will enable me to deepen my understanding of some teaching and learning approaches and strategies that promote active participation of learners in class, learn how to cultivate professional learning communities in schools through lesson study, learn from participating countries how they handle mathematics lesson in their countries in relation to what we do in my country and eventually grow professionally and be able to trainer other teachers back home to improve classroom practices through lesson study.

After undergoing this training in Fukui I have gained a lot of knowledge beyond my expectations. As a teacher I read about inquiry and reflective learning but I thought it works for high school and university students. This training has proved me wrong and I have seen that it's workable even at elementary and Junior high schools after reading the poa annua, music Quist and Petra and toy reports. Observing lessons have deepen further my understanding of the inquiry and reflective learning. All lessons I have observed in Fukui actively engaged learners in the learning process and the teacher provided an opportunity for learners to learn from each other. The learners were put in manageable group size (4 learners per group) and were engaged in inquiry learning more especially the science one (weather and soluble and insoluble substances). They were researching in class trying (experimenting) new ideas on their own and writing reports about their findings. I have indeed learned new approaches of teaching and learning beyond my expectations.

The process of reflection learning is very wonderful, it greatly promotes thinking in learners because I see that at each stage of reflection the learners are faced with new challenges which needs to be addressed and this leads to discovery of new ideas. The spiral then continues and problem solving skills are enhanced in learners. More importantly a teacher also learn from learners.

My take home are all what I have learnt here but there some which needs full involvement of many stake holders which can not to be done immediately, such as introducing the ideas to all parts of the country. This will mean to have project proposal which may take long to be approved. I will begin by making sure that I try the practice of inquiry learning and reflective study with one teacher who has also attended this training here at her school. Together we will orient her fellow teachers on how to conduct reflective lesson study will then kick start the inquiry learning with her class. Other teachers will observe her and learn from her. Once the other teachers have developed interest and attached value then these will form the core members.

These approaches are never used in primary, and secondary schools my country. I now begin to wonder why? I will make sure I introduce this type of learning in my country because it can work perfectly. Teachers in my country research for learner and bring ideas into the classroom and learners follow them. The teaching and learning is examination oriented, where a teachers interest is to give learners what the syllabus is demanding and make them pass national examinations without inculcating creativity, critical, and problem solving skills in learners. I really appreciate what I have learnt here, will change this line of doing things and eventually promote the quality of learning.

Another turning point is the way reflection Lesson Study is conducted here and how Professional learning communities are cultivated. In my country lesson study is a new practice which many teachers have heard it but not experienced it. Currently we have just started at one cluster after learning it from Zambia. (A cluster is made of few schools around a community in a district. Then clusters make a district and districts make a division then divisions make the nation structure).

#### **Udom Paul Michael**

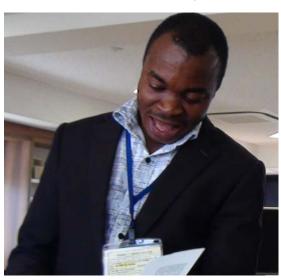
#### Nigeria

My name is UDOM Paul Michael, a Nigerian, from Akwa Ibom State in the South South geo-political zone of the country. I am a teacher working with State Universal Basic Education Board (SUBEB), Uyo, Akwa Ibom State, Nigeria, since 2009. Before my engagement in the public service, I had served in Community Secondary Commercial School (CSCS), Urua Obo, Ikot Ekpene, as a Mathematics and Computer Science teacher (2005 – 2006).

The lesson study we are conducting is different from the one we have experienced in Japan. Ours involve subject groups which meets to plan lessons together based on the identified problem and teach the lesson, others observe. They discuss the lesson and plan it again incorporating the improvements suggested by members and the same teacher teaches the second lesson to different set of students of the same level as the first ones. They also discuss this lesson and make further improvements which are documented and kept as a reference material for all.

What I have learnt here is that lesson study should not just focus on only trying to find a solution for a problem but it's a forum for teacher to grow professionally by learning from each other even those teachers from different subjects should meet and share ideas. By involving different subjects specialist is when you learn more. The group are very small which maximizes participation of each member.

The idea of cultivating the Professional learning communities of learning is just exception as it is completely new to me. I appreciate the principles on which PLC are based such as learning through practice, sharing mission, vision and value focusing on learning. Perceiving achievement as from real students learning, inquiring best practices as whole school activities, commit to sustainable evolution and collaborative culture. The way PLC are organized in deed transform knowledge through the shared inquiry. It is also evidence informed where the interest is on practice of the communities. In my country the practice is that knowledge is transferred from one person to the other and it imposes the rigid requirements. Usually it is results oriented and interested in performance, as a results the benefits are minimal and one way.



I also participated for 2 years in the Federal Teachers' Scheme (1st batch December 2006 – November 2008) where I was posted to Migrant Farmers' Primary School Adatak, Ikot Ekpene. The school was a newly established school. So it was not a big school.

The Federal Teacher's Scheme (FTS) is a Federal Government of Nigeria's intervention programme aimed at providing young graduate teachers internship and employment opportunity. The programme also tried to solve the problem of lack of qualified teachers in schools in the rural communities.

Within the last seven (7) years, I have taught in Government School 1, Ikot Ekpene (2009 – 2015), Migrant Farmers' Primary School, Adatak, Ikot Ekpene (2015 till now). Basically I am a Mathematics and Computer Science teacher, because I studied these combination during my pre-service years at Federal College of Education (Technical), Omoku, in Rivers State, Nigeria. But as a teacher in primary school, you are expected to teach all the school subjects like, English language, Mathematics, Science, Social studies, Moral Instruction, Agricultural Science etc irrespective of your discipline.

Though I studied Mathematics education/computer science, it was not that easy

to teach. Through many in-service trainings attended like SMASE, I discovered that there was also the greater need to demystify Mathematical concept which are more of abstract ideas and paper work. Through SMASE I was able to find out the connection between everyday life and Mathematics topics, so I needed to communicate same to my pupils. This I see as the only way to bridge mathematics topics, textbooks printings and pupil's day to day life. SMASE trainings equip teachers with skills of improvising raw materials for my lessons. SMASE Nigeria project is an initiative of the Federal Government of Nigeria and JICA aimed at improving teaching/learning of Mathematics/Science through positive change of attitude of teachers. SMASE is an acronym for Strengthening Science And Mathematics Education.

Prior to this training, I didn't understand the concept of lesson study. Of course it was mentioned during the 2014 SMASE National INSET at Kaduna. So I was excited when I was selected to participate in this training. Now I have witness teachers sit together and reflect on their performances and students studying together in groups. This is a way of learning and it is impressive.

## Victoria Mkungula Malawi



Hello! My name is Victoria Mkungula from Malawi and I am a mathematics teacher. I have been

teaching secondary school students since 2010. I did my tertiary education at Catholic University of Malawi where I specialized in mathematics. The reason why I was interested to study mathematics is that by nature the subject is applicable for all human kind directly or indirectly. It can be used to solve problems in our daily lives. For instance, when we want to buy things, foreign exchange, banking and so on... in short we use mathematics in our real life situations in different ways. The subject encourages students to think critically in every situation they are in.

Education system in Malawi follows 8-4-4 pattern. Students spend 8 years in primary school from standard 1 up to 8, 4 years in secondary school and then 4 years in university. This depends on the ability of the students because no student is allowed to go to the next class if one does not meet the requirement of the final examinations of academic year. School calendar has three terms, 15 weeks first term from September to December, 12 weeks in second term from January to March and 14 weeks third term from April to July.

My school is Msalura Community Day Secondary School in Salima, central part of Malawi. Classroom experiences are a vital part of my job as a teacher. No one can become educated without the efforts and influence of a teacher, hence I was interested to join teaching with full confidence because teachers are important, they not only provide instruction to students, but they as an additional source stand encouragement and pride in students' lives (role models). For people to become who they are today and realize their goals, it is because of teacher who imparted knowledge to them. Since I am a deputy head of science department at my school, I have a number of roles and responsibilities to play such as; planning, checking schemes of work, keeping records of work, supervising science teachers, estimating departmental budgets, handling indiscipline cases, departmental conducting meetings participate in SMASSE inset every year which aims at strengthening mathematics and science in secondary education. This inset normally occurs during holidays. I have been a form teacher for four years. In our school, we also involve students to conduct study circles every week Mondays and Wednesdays where they discuss some challenging topics of different subjects. Time table is set for every class by the form teacher and each teacher is allocated a day to supervise his subject. Apart from this we are also doing lesson study at a small scale within our cluster of 28 schools and my school is the cluster leader. It has started with all head teachers and heads of all departments. They regularly meet and discuss lessons of different subjects. Thereafter, it will be done at school level.

With challenges that face so many teachers in Malawi, there are many problems that I have

experienced in the practice of education and this negatively affects working ability and students learning. Problems such as large class sizes, lack of teaching and learning materials, acute shortage of teachers, low motivation to teachers among others are common in Malawian schools. For example teacher-student ratio is 1 teacher to 50 students that may vary according to number of students. In order to solve other problems like inadequate teaching and learning materials, we improvise using TALULAR. This means Teaching And Learning Using Locally Available Resources where students take part in bringing the required materials.

Let me express my gratitude and thank people who have organized this program. We have learnt a lot and this will assist us in our respective countries to improve the quality of education. I am happy that I have acquired knowledge about lesson study and inquiry based learning processes and when we will go back to Malawi, we shall provision of positive consider the constructing behaviors of students in classroom. One of the most compelling reasons to my hope for the future of school education is to make a difference in education, lives of students and experiencing the joy of making that difference, having in mind a true vocation and experiencing a high level of interpersonal interaction. Working collaboratively with colleagues will assist to investigate areas of interest and strategies through discussions that can bring effectiveness of my teaching profession and improve student learning. Learning never ends, I would also like to continue my studies in the field of education so that I will be one of the educators contributing to effective and active learning for students in Malawi.

## Closing Address for the JICA 2016 Knowledge Co-Creation Program

## November 25, 2016

## Tomoki Nitta, Director General of JICA Hokuriku Branch Office

Dr. Hideo TERAOKA, Vice President, University of FUKUI,

Dear JICA Participants and Ladies and Gentlemen, good morning

I am Tomoki Nitta, Director General of JICA Hokuriku Branch Office.

On behalf of JICA, I have the honor to say a few words on this occasion of the closing ceremony of Knowledge Co-creation program Improvement of Quality of Education through Lesson Study (B) course.

First of all, I would like to extend my heartiest congratulations to all of you for the successful completion of the knowledge co-creation program. I sincerely pay my highest respect to you all for your active participation in each subject throughout the program in Japan.

I think that this training course was finished as fruitful for all participants. During this program, you learned and found a lot of thing through school visits, discussions, lectures, and so on. I hope what you have learned and experienced here would be utilized in your own countries after your return. Program is finished today, but your challenge will start in your countries. I wish you good luck.

## Reflections from 2016 Knowledge Co-Creation Program Elizabeth Hartmann, Lecturer University of Fukui

In this short report, I hope to convey my personal reflection and the implications learned from the role of a co-facilitator of the program. There are four main ideas I will reflect on:

- Learning opportunities through cycles of inquiry;
- 2. The importance of reflective reading and writing;
- 3. The importance of context; and,
- 4. Continuing the cycle of professional learning.

A full description of the activities and extended reflection is available in DPDT's annual publication.



#### **Learning Opportunities Through Cycles of Inquiry**

The three weeks were structured in a condensed version DPDT's graduate programs and spiral process of learning and reflection. The three-week program included inquiry-based activities,



opportunities for observation and reflection, small group discussions, reading and writing of practical records, and а culminating International Communities of Practice Round Table event. This structure with multiple cycles of inquiry and opportunities to read, observe, write, and discuss about practice allowed for deep reflection and meaningful experiences for participants. The JICA participants came with a variety of experiences and expertise in education. This afforded opportunities for rich discussion and reflection on reflective lesson study and classroom observations.



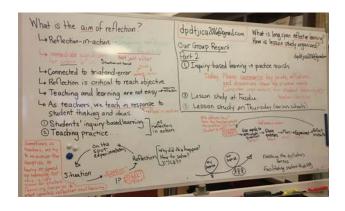
Participants were able to develop their own understanding and meaning of inquiry-based learning and reflective lesson study through these shared experiences and discussion. This contrasts lecture-based and short-term professional development training programs that focus on providing information about the structure of a particular professional development model or strategies to improve teacher effectiveness. Previous JICA programs have focused on this type of professional development, which often provides a rigid handbook, protocols development professional programs, expectations for implementation. In contrast, this program focused on supporting participants in understanding how to reflect-in-action (Schön, 1983) and how to engage in reflective lesson

study. Through this sociocultural approach to educator learning, participants developed their own images and meaning of reflective lesson study and what it could look like in their contexts.

Week 1. In week one, the goal was to follow the process of reflective learning and reflective lesson study. This involved sharing their job reports, observing three lessons at Fuzoku Junior High School, participating in the public lesson study at Ago Junior High School, and discussing observations in a cross-session. This allowed participants to get a first glimpse of Japanese classrooms and the process of lesson study. Participants were very impressed by the student-centered teaching style, inquiry-based activities, and management of the classroom environment.



**Week 2.** In the second week, the focus was the process of longitudinal reflective learning and the organization of lesson study. Participants began the week by reading teachers' practice records and discussing in small groups.



On Wednesday, they observed two additional lessons at Fuzoku Junior High School, observed a small study group of teachers meeting to plan for lesson study, and discussed the various activities and structure of lesson studies at Fuzoku through a presentation by Pauline Mangulabnan. This day was important in situating the previous week's observation, the reading of practice records, and observations of various lesson study activities

within one school's lesson study organization. Participants had opportunities to reflect on the logistics of such an organization, the content of what gets discussed and worked on during these lesson studies, and the possibilities for their own contexts.



An additional lesson study observation at a third school of their choice (Maruoka Minami Junior High School, Fuzoku Elementary School, or Wakasa High School) provided another value experience and opportunity to understand yet another iteration of lesson study. On Friday, participants were able to share about these experiences in cross-session groups.



Week 3. The final week focused on connecting the previous observations, readings, and reflections to their home contexts. Discussions, presentations, and reflections focused on how to cultivate communities of reflective lesson Participants focused on how this type of collaborative community and reflective practice could be supported in their own contexts. In their final reports, they summarized their observations and reflections about reflective lesson study. In a culminating Round Table, participants shared their reflections with educators from all over Japan. The response from participants about the three weeks was overwhelmingly positive, and they felt energized to return to their own contexts and to engage in this work. Most participants felt that this program was a starting point for a

productive, ongoing partnership examining the possibilities of reflective lesson study in their own contexts. Their plan of actions showed that they were attending to how to motivate and encourage other teachers to engage in this type of reflective practice.



## The Importance of Reflective Reading and Writing

Reflective reading and writing were integral components of this training program. The important role of the reflective reports was articulated in the programs' design, but was also something that the participants noted. In the beginning, participants were unsure about the purpose and process of the reflective writing. However, after engaging in the writing, participating in small group discussions, and reading other practice records, participates understood the value of writing as an opportunities for self-reflection and thinking and as a tool for communicating experiences and knowledge.

Even with a wonderful translator, language for remained а barrier understanding observations fully. Thus, reading practice records allowed participants to understand more fully a classroom's contexts and the events as they unfolded over multiple days, something that was not logistically feasible in our short program. They could read about class activities, student responses, and teachers' reflections. These reflections allowed participant to understand a variety of inquiry-based teaching examples.

In addition, two book excerpts provided background on the concept of reflection-in-action, inquiry-based learning, trial — error — reflection cycles, and principles for cultivating reflective, professional learning communities (Schön, 1983; Schön, 1987; Wenger, et al, 2002)From *Educating the Reflective Practitioner*, participants came to understand the parallels between student and teacher learning and the important of reflection in

the trial and error process of teaching. The excerpt from *Cultivating Communities of Practice* was also important in framing how the participants talked about designing opportunities for professional learning. Participants referred to this chapter throughout discussions in the third week about how to support and engage in reflective lesson study in their own contexts.

In addition to reading, participants engaged in reflective writing almost every day. Much of this writing was informal, based on observations and small group discussions. Three formal, more structured reflective writing tasks supported participants in thinking about the focal points for each day. Through this writing, participants reflected deeply on their experiences in the program as well as their contexts back home.

While benefits of reflective writing were evident in the program and understood by participants, this process was not without challenges. From my perspective, the major challenge is how to support this process of reflective writing. In DPDT, teachers are accustomed to engaging in reflective writing. They are used to talking about their practice and writing about their reflections and thinking. While I believe in the power of reflective writing, I do not believe that this is necessarily a natural process to engage in. How should participants talk about practice? How should they write? What should be included in a practice record? How do they describe an observation? What counts as reflection?

Writing is a skill. If educators have not engaged in reflective writing, then they will need support in understanding what reflective writing is and how to engage in this process. Over the three weeks, through small group discussions and reading of records, participants practice understood this reflective writing process. However, explicit writing support could have more efficiently and smoothly supported their engagement in this process. I am not suggesting that participants need a checklist or a rigid template for writing. I am suggesting that samples of, tools for, and explanations for writing be more intentionally included in the program to support their learning.

In addition, to supporting the content of reflective writing, it is important that the logistical process of writing be supported. Some of the participants

struggled with typing and thus needed opportunities to reflect through handwritten methods or needed additional time before or after the sessions to work on their reports on their own. In the first week we also struggled with the logistics of compiling and printing reports. This was improved on in the second and third weeks by giving clear deadlines of when to complete drafts of writing, having a Google Drive and email address to transfer and store files, and provide a very simple template that standardized the formatting of reports.

While my reflections may seem critical, I believe that fact that the content of the reflective reading and writing support participant learning is not insignificant. This was a huge success in such a nontraditional, inquiry-based professional development program. My suggested improvements are mostly logistical and are things that can be better planned in advance by myself as a facilitator.

#### The Importance of Context

Throughout the program, I continued thinking about the importance of context: the cultural context, the participants' home contexts, and the contexts of the schools sites selected. Pauline presentation was Mangulabnan's a opportunity for participants to learn about the entire structure of lesson study at Fuzoku Junior High School, how there are different kinds of lesson study, and how individual activities are situated in the larger lesson study organization. Participants appreciated learning about the background of the schools and seeing different versions of lesson study. In addition, talking with teachers was helpful for participants to hear about the background of the classrooms and inquiry-based teaching style.

One topic that kept coming up was the schools selected for context of their observations. These schools are clearly innovated and well-resourced schools. This contrasts most of the participants own contexts, where funding is low, schools lack resources, and class sizes are sometimes over 100 students. What is the role of context? How can ideas from these schools be taken up in very different contexts? While participants did discuss this, I believe these questions should continue to be considered in future collaborations.

In addition to the school contexts, participants were very interested in the cultural context of Japan and the Japanese education system. They wanted to know more about Japanese culture and the rationality behind reflective lesson study, inquiry-based learning, and the design of these three weeks. How to more explicitly discuss these issues of cultural context is something to consider for future programs.

#### **Continuing the Cycle of Professional Learning**

I have already discussed how the three-week program was design to include multiple cycles of inquiry. Participants began by looking at student learning in one lesson and a single lesson study, then student learning longitudinal learning process and teachers' longitudinal learning in multiple lesson studies, and finally the cultivation and continuation of sustainable communities of practice. While the three-week program is over, I hope that their learning continues in more cycles of investigation and reflection. This is now the biggest challenge point in professional development programs: How will we continue to support their learning?



While participants had a valuable experience in Fukui and learned much, they stated (and I agree) that they wanted to continued support in learning to facilitate this type of reflective lesson study. To realize the potential of this type of professional learning, continued support for these educational leaders is necessary. For example, follow up training sessions in Africa to support their facilitation of reflective lesson study. Invitations for these participants to return to Fukui for future Round Table events could not only continue supporting their learning, but could help us learn from their experiences. This brings me to a challenging, but important question:

What does it mean to productively cultivate and support international communities of practice of reflective lesson study?

This final question is my challenge. It is not enough to engage educators in an intensive three-week cycle, then to send them back to their own contexts to engage in this work in isolation. How can we continue to support their learning and to learn from their experiences?



If you have questions and comments related to the Knowledge Co-Creation Program, please contact lizhart@u-fukui.ac.jp

#### **Book Excerpts**

- Schön, D. (1987). Educating the reflective practitioner. (pp. 26-29)
- Schön, D. A. (1983). The reflective practitioner: How professionals think in action (Vol. 5126). Basic books. (pp. 76-93)
- Wenger, E., McDermott, R. A., & Snyder, W. (2002). Cultivating communities of practice: A guide to managing knowledge. Harvard Business Press. (Chapter 3)

#### **Presentations**

- Kimura: Challenge for the Reflective Lesson Study; Cultivating the Professional Learning Communities
- Makita: The Process Behind Developing Teacher Competence
- Mangulabnan: Professional Learning at Fuzoku
- Saikawa: Overview of the Fukui Prefectural Institute for Educational Research

## A FOLLOW UP REFLECTION: REPORT OF LESSON STUDY MEETINGS WITH TEACHERS IN IKOT EKPENE

The Knowledge Co-Creation Program was a positive experience for all participants and facilitators. It is the DPDT's sincere hope that this collaboration continues beyond the three week training program to support participants as they engage in lesson study in their home context. Below is an excerpt of a report of one of the participants' initial efforts to engage in lesson study after participating in the 2016 program.

#### **Udom Paul Michael**

## **Master Trainer and Classroom Teacher, Nigeria**

Following my participation in the JICA training programme held at University of Fukui, Japan, I am well equipped with the knowledge and have developed the skill and the capacity to:

- (i) Lead teachers in lesson study meeting
- (ii) Train teachers on the fundamentals of lesson study
- (iii) Guide teachers to conduct lesson study meetings
- (iv) To sustain the long term reflection process of lesson study.

The objective of the training in Japan was "to enhance the capacity of the participants in conducting lesson study which promote the quality of teachers".

On my return I submitted my training report and work plan to JICA, Federal Ministry of Education, Abuja and SUBEB, Uyo, Akwa Ibom State.

The work plan I drew had three (3) alternatives:

- A- work plan for lesson study National,
- B- work plan for lesson study –Akwa Ibom State, and
- C Pilot Lesson Study meeting with teachers (colleagues) in my locality.

**Lesson Study meetings:** I opted for the 3<sup>rd</sup> alternative as a pilot phase since:

- (i) It cost me and the participating teachers and the host school little or nothing to meet, teach, observe and discuss.
- (ii) The reactions of the participating teachers are useful input in the overall focus of the lesson study programme in Nigeria (planning, timing, material resources, and funding, monitoring and support services).

(iii) Our training institution in Japan –DPDT University of Fukui advised that we can start lesson study with our immediate colleagues by cultivating a culture of learning community among ourselves, then generate useful reactions (input) which is to be built into the overall lesson study action plan.

(iv) It was easy for me as a SMASE State trainer to draw up core teachers who had been trained on the SMASE principle of ASEI-PDSI for a follow-up meeting and support service.

1<sup>st</sup> Lesson study meeting: Migrant Farmers' Primary School, Adatak, Ikot Ekpene. Jan 9, 2017. Attendance: 7 teachers (home school).

Activity: I addressed the teachers on the topic: "Lesson Study- what is it all about". Lesson study is the practice of sharing ideas, thoughts, and skills among professional teachers. It is helpful to the teachers in many ways. Once a teacher is able to identify his challenge, and share it with other teachers during lesson study meeting, solutions will be provided for him.

Reaction from participating teachers: The teachers were enthusiastic about being part of the lesson study meeting. They looked forward to benefitting from it greatly. They called for regular meetings. The head-teacher Mrs Hannah J Udoh, a SMASE teacher, was full of appreciation to lesson study, hoping that it will be helpful to the teachers just like SMASE training.

**2<sup>nd</sup> lesson study:** Methodist School, Ikot Obong Edong. March 14, 2017.

**Attendance**: 9 teachers (please see list in attached appendix).

Activity 1: I assembled the teachers by 11am and addressed them on "Lesson Study- what is it all about?". Lesson study involved a group of professional colleagues (teachers) visiting a particular school, observe a class and have post lesson reflection with a view to improving ourselves on the practice.

**Activity 2:**We observed an English Language class in primary 5.

Class size: 34.

**Topic**: Reading and Comprehension.

**Title of the passage:** "why some pupils fail in school".

**Activity 3:** Post lesson reflection. The class teacher Ms Inimbom Akpan explained that she treated new/difficult words from the passage with the pupils the previous day. That the lesson was a continuation from the previous day. That she was particularly interested in the passage. That "it

points out things I should do"; and that "the passage teach me as a teacher not to be a lazy teacher". She concluded.

**Remark**: It was observed that she stayed focused on the lesson. She called for input from both boys and girls (gender sensitive). She posted sufficient and relevant questions to stimulate the pupils to think along the passage.

Professional Support: Shewas encouraged to use group study approach rather than whole-classapproach in her class. The advantage is that some of the weak readers/even those who cannot read at all will be able to draw help from group members directly. Pupils learn better from their peers. She was also encouraged to pay attention to individual pupil's learning style/pattern; that way she would be able to discover new surprises in her class.





During L.S meeting @ Methodist School, Ikot Obong Edong

**3<sup>rd</sup>Lesson Study Meeting:** St Mary primary School, Ikot Atatsung/Ikot Obong Otoro March 17 2017 **Attendance:** 9 teachers

Activity 1: 30minutes lecture on the theme "Making Practice Report". Teachers were encouraged to pay attention to their lesson as it flows, make records of turning points of such lesson. Note pupils initial thought, and final discovery. Make note of input materials, how pupillearn and when they themselves require extra support, assistance received, and such other things that may help effective lesson delivery.

**Activity 2:** Lesson observation. We observed a mathematics class in Primary 2.

**Topic**: Subtraction of numbers.

Classsize: 56

**Activity 3:** Post Lesson Reflection:

Observation: Pupils were observed using bottle counters and counting sticks to perform the class activity. The class teacher was able to show effective classroom management by moving round to support the weak learners. Some pupils were unable to count and subtract their counters. SupportiveComment: The class teacher Mrs Ekaette Obot, was encouraged to link the lesson to more familiar objects like biscuit, sweets and even books. She was also encouraged to attempt working with them in groups than individual

approach, and to study individual learner's personality while in class.





During Lesson Study meeting @ St. Mary Primary School, Ikot Atasung/Ikot Obong Otoro.

 $\mathbf{4}^{\text{th}}$  Lesson Study meeting : Government School,

Ikot Obong Edong, March 22, 2017.

Attendance: 6 teachers

**Activity 1:** I addressed the teachers on the theme "IF TEACHERS MUST PRODUCE ACTIVE LEARNERS, THEY MUST BE ACTIVE LEARNERS THEMSELVES". The bottom line is that teachers who has since stop or refused paying attention to new trends in his career cannot make much impact on his learners, and hence cannot help them to become

his career cannot make much impact on his learners, and hence cannot help them to become active learners. Being an active teacher requires more than writing lesson notes, and of course talking to the pupils. It involve carrying out research about what to teach?, how to teach?, what input should be brought in?, what activities should be designed for my lesson?, how do my pupils reacts to lesson?, how do they learn?, can I adjust my lesson to suit their learning styles?, and such similar stuff. Work all the time to learn from your pupils, colleagues, and other stakeholders. Teachers should also study in groups, lessons they are to teach way far ahead of time. This is necessary so we could identify weak points of our lessons. That way our learners will see and start to

**Activity 2:** we observed a mathematics class in primary 6.

Topic: Least Common Multiple (LCM)

Class size: 50

emulate us.

**Activity 3:** Post lesson reflection: the class teacher Mrs Rose S. George explained that the lesson is a follow-up lesson. That she decided to use the long division method for that lesson.

**Observation**: some pupils were unable to solve the class activity. They complained that they don't understand the process. Some pupils were quite impressive, as they did not lost any time solving the class work.

The class teacher was encouraged to re-teach factors of numbers, show the pupils how to obtain prime factors of numbers, and from there, move

on to use prime factors to break two numbers and obtain their LCM.

Of course we are still open to any other idea that will be useful in teaching LCM.





During lesson study meetings @ Government School, Ikot Obong Edong.

#### **General Observation/Notes:**

- (i) The participating teachers rated the lesson study meeting as very good, in the sense that it has help them to interact with colleagues from other schools and from other background who may be more knowledgeable and skillful in their respective subject areas.
- (ii) They called for the program to be sustained.
- (iii) They also express their willingness to attend lesson study meetings anytime they are invited.
- (iv) They observed that lesson study is not stressful, but that it serves as a guide to them.
- (v) They demanded for lunch and transport allowance as incentive to encourage them to attend more lesson study meetings.
- (vi) The head-teachers of the schools where Lesson Study were held, were very grateful to have their schools selected to benefit from such an interesting meeting. They prayed we come back soon.
- (vii) The Education Secretary was happy to hear about Lesson Study and wish to attend our meetings by next term.

**Recommendation:** From the report above, it is observed that teachers are very happy with the lesson study programme, and are willing to continuously participate in lesson study meetings. Therefore I recommend that Lesson Study be instituted in full scale in Akwa Ibom State, and in Nigeria at large; and be sustained.

Prayer: it is my hope that the Federal Ministry of Education, Abuja, Universal Basic Education Board (UBEC), Abuja, and State Universal Basic Education Board (SUBEB), Uyo, Akwa Ibom State will approve the creation of Lesson Study meetings among our teachers in our public schools, and that it will support full scale implementation, and sustained it.

## Round Table: International Zone

## The World Meets Fukui in Three Days: Reactions on the First International Fukui Roundtable

Pauline Anne Therese M. Mangulabnan, Graduate Student Nara Women's University



Last February 17, 18 and 19, 2017, educators from six different continents were invited to take part in the Spring Roundtable at the University of Fukui. They were from America, Australia, Bhutan, Cambodia, Indonesia, Colombia, Ethiopia, Lithuania, Malawi, Philippines and Uganda in which sixteen of them were sponsored by the university. There were classroom teachers, school leaders, graduate school students and university professors. We were also joined by special teacher training program students of University of Fukui. For three days, they were able to observe classes, share their own educational programs, listen to situations of educators across the globe and reflect on their practices with respect to those three days in Fukui. Moreover, each one of them were able to participate in the unique style of roundtable discussion of University of Fukui from listening to the plenary and panel discussions to actually sharing what they are currently working on.

## Day 1: Classroom Observations at Fuzoku Elementary and Junior High Schools

On the first day, everybody went to Fuzoku Elementary and Junior High School (now, Fuzoku Compulsory Education School) to discuss their 'three seeds' and then observe classes. Participants had sent us their 'three seeds' before coming to Japan. It included their professional background and experiences, teaching milestones or episodes that had shaped their current perspectives about education, and the challenges that they did or are facing in their own work places. Having the participants discuss these things in small groups at the start of the program tear down all walls of anxieties or nervousness. They felt comfortable with each other. Some had even mentioned, 'The similarities in the challenges we face across the continents was interesting. Despite differences in our locations, I was surprised to hear how similar our problems are... This was a great experience!' 'Despite our many varied contexts, we are all grappling with similar challenges. Hearing the different strategies people are taking consolidates for me the power of shared learning.'

And then they saw, Mr. Yanagimoto's Grade 8 Mathematics, Mr. Kinoshita's Grade 8 Science, Ms. Matsuta's Grade 8 English and Ms. Watanabe's Grade 3 Mathematics classes. They were impressed to see how students are well-behaved and responsible towards their own learning, how organized the classes are with very

prepared teachers, how relaxed the learning environment was which allowed students to voice out even their misunderstandings and how enthusiastic and active the students are towards thinking and learning among many others. A participant even wrote in his reflection, 'I am impressed to have seen classes which actually demonstrate what active learning, exploration, inquiry and collaboration, and other 'buzz' words are in action and reality...'

They also had a chance to speak to these teachers plus Mr. Makita and Ms. Yanagi of Fuzoku Junior High School who shared about teachers' perspectives on teacher reflections, lesson design, building a learning culture in school, and relationship between students and teachers. Participants wrote in their reflection about the school visit,

'Teachers' deep respect for students were evident. Moreover, teachers' professionalism, content knowledge and knowledge of teaching were impressive...'

'What stood out is having the practice of research at all levels of the educational practice, including first graders, to be published in some form. Documentation is a very important tool for research and education and provides learners and educators alike to review what works and what doesn't...What can be better evidence for student learning than the work/s of the students themselves?'

Each one of them was also able to eat with the junior high school students and observe their daily cleaning tasks. The students were also delighted with this experience as they were not only able to practice their English but at the same time learn about other countries. It was the first time that they had seen that much of foreigners in their school. One of the Colombian teachers even tried cleaning with them. At the end of the day, participants moved to the university and were given the chance to discuss among themselves the whole day's activities.

The participants were divided into three groups: Science, Mathematics and English. Mala, Mauricio and Andrius were in the Science group; Christie was in the English group; Liz and I were in the Math group. All the groups were provided with colored sticky notes (1) to provide structure to the discussion (i.e. pink sticky notes for positive comments, blue for questions, and yellow for other comments or room for improvement), and (2) to allow them to experience one of the methods of post lesson discussions in Fukui. After thirty minutes of discussion, each group presented a summary of what they had discussed among themselves. In the pictures below, one would notice the the pink stick notes showing how impressed the participants were with the lessons and also how the classroom observation sparked more questions with all those blue sticky notes.

Below are some of the things that they had written on the pink sticky notes on student-teacher relationship:

- teacher's high respect towards the students and vice versa were evident in the classes
- strong spirit of cooperation between students and teachers
- the teacher gave all students a chance to give their hypothesis

On student-to-student interaction and engagement:

- student engagement is admirable; they were engaged and active in class
- students were using their own language to give advices to the younger students to pass on the culture of learning
- students were discussing how to express their ideas and their thoughts; it was also very easy for the students to come up with their groupings
- students' high level of autonomy and selfcontrol were impressive
- the students seemed to really enjoy the class

On class atmosphere and pedagogy:

- the classroom is conducive for students to learn; it is a safe learning environment that supports discussion
- the teacher linked previous ideas to the new ideas; the teacher also used students' outputs to be able to deepen learning
- the whiteboards allowed sharing and analyzing students' strategies during a

task that seemed to be exciting for students

- the teacher utilized students' reflections from previous lessons to follow through their thinking
- the article used in the class was realistic

Each participant came with their own unique experiences in education, the classroom observations prompted a lot of questions related to issues and challenges of their own educational institutions and conditions. Despite differences in backgrounds and contexts, their questions were related with each other and were about classroom management, student engagement, lesson design, assessment, collaborative culture, learning materials and student reflections. Below are some of the most common ones:

- How did the school build such a culture where students are very responsible, wellbehaved and enthusiastic in doing their tasks?
- Are teachers monitoring who speaks/ participates? How? Do teachers plan for differentiated learning?
- What is the most effective form of feedback which is used? How do they assess what students have learned? Do they use rubrics in grading students' work of performance tasks?
- How do they manage students' committees for each subject? When they do start the committee system, is it starting from the junior level?

The participants were so engrossed in their discussions that they barely would allow us to call it a day. It was a packed tiring first day but no one complained. On their reflection sheets, they reiterated how impressive the classes have been which demonstrated active learning, inquiry and collaboration. They also wrote their appreciation of having the opportunity to experience first-hand a student-centered class and reflective students. These were some of the things that they would want to bring back to their own respective countries and institutions.

Despite the jet lags and the cold, participants spoke warmly and greatly about the first day - the students, the teachers, the learning that took place, and this activity of DPDT. In my small group,

teachers exclaimed how they could not wait for what was in store for the following days.

#### Day 2: Round Table Forum and Symposiums

Days two and three are the actual roundtable days at the University of Fukui. On February 18 (Saturday), everyone listened intently as Ms. Hartmann discussed Fukui's roundtable objectives and designs, and what is the Department of Professional Development of Teachers of the University of Fukui. She had also introduced the international efforts of the department, had given an overview of reflective lesson study, and had clearly elaborated on what the roundtable is for. After which, participants went back to small groups to discuss more of their ideas and observations in the previous day. In addition to that, they shared what it means to their own practices. One of them expressed, 'It was my first time to see classes outside my country. I would want to bring this new perspectives of listening to students and focusing on learning back to my country.'

After lunch, everyone moved to the 13th floor of the Science Building to experience student poster presentations where elementary, junior high and high school students presented their projects to participants from all over Japan and all over the world. A group of elementary students discussed about their research on the favorite lunch of Japanese students; junior high school of the attached school shared about their batch TV project; and some high school students shared about their researches on Japanese traditions. The participants were impressed not just with these students' outputs but also their abilities to speak in front of adults they do not know. They also commented that such an opportunity makes learning more authentic for these students adding more value to the tasks they do in school. Then, everybody headed back to Academy Hall to listen to Charles, Victoria, Eva and Ermias' presentations about their actions to improve education in their respective countries after their three-week intensive training on Knowledge Co-creation in Fukui last November 2016. All four of them shared what they had learned from JICA - DPDT training last November, how the experience had inspired them to share about reflective lessons study, some of their challenges in the past three months before coming back to Fukui, and their future plans. This was also attended by more educators from JICA and other education sectors.

Then, participated in the they poster presentations of university students, pre-service teachers and in-service teachers. The participants got particularly interested in the presentations of the Tankyuu Learning Community Network of University of Fukui, practices of graduate students of DPDT, and community activities which were tied up with schools. Some of them asked the students how they came up with their research topics and why do they wish to enter the education field. The group also had the privilege to listen to the panel discussion of Mr. Morita, Ms. Ishii and Mr. Kaneko on Lesson Study and new Course of Study of Japan. The main points of the panelists were:

- when teachers collaborate with each other, they help each other understand the difficulties or complexities of the curriculum and find ways how to adapt it as a community;
- through lesson study, everyone thinks together and discusses together how to make classes more fun; through lesson study, everyone understands students across subjects promoting interdisciplinary learning; - through lesson study, teachers try to understand students' ideas deeper; and - through lesson study, teachers share and use each other's abilities - even students' abilities - to improve learning situation and learning itself.

And then, each country formed their own groups reflect about their experiences observations here in Fukui and how it can make sense in their own contexts. The room was filled with engaged teachers speaking languages. My group had more questions than answers but had agreed that reflection among teachers is an important aspect of professional development which would benefit both teachers and students. They were impressed with what they heard during the panel and by the panelists themselves. Discussions in the room were so intense that many had continued it over dinner (while enjoying Fukui's delicious food).

#### **Day 3: Round Table Discussions**

On the last day - February 19, 2017, all participants were divided into smaller groups with educators from at least four different countries and a Japanese. In addition, there was also a

Spanish group. Until 2:10 in the afternoon, these teachers were sharing and learning from each other's practices. Questions were flying across the big hall as these educators were enthusiastic to learn more from their colleagues from another side of the world. Some of the practices shared were about Math Labs (America), Mathematics Learning Space (Australia), Alternative Vision for Educational Change (Colombia), Adaptation of K12 Educational Policy (Philippines), Teaching Tolerance Through English Camp (Lithuania), Drama and Choral Reading (Indonesia), and Learning Assessment (Japan). Those three jam-packed days seemed too short and not enough to meet everyone's expectations. But that is just me; the comments from the participants spoke otherwise. Here are what some of them wanted to take home with them,

> 'My take home here is that teachers should be open enough so that he can grow professionally. the teacher should thin about students' needs and on how students are learning and not just knowledge itself. Also, the idea of school culture including values, cleaning and character building are important.' very (Malawi)

> 'From this experience, I want to bring back home the practice of reflective learning, small group discussions in school, and deep learning. I also have learned about Math Labs coaching, as well as, the techniques of the Science and Math classes. I would want to bring that home too.' (Philippines)

'I would love to implement the idea of open lesson study in my country. I have had this idea of doing reflective study but never took it seriously. But now hearing many talk about the effectiveness f the strategy, I am fully convinced to implement this when I go home. I will also encourage my colleagues back in my country to do the same.' (Bhutan)

'I think the practice records are fascinating both as a tool for supporting educators to reflect on their own practice AND as a tool for sharing knowledge/experience within a community. I am interested in think about how this kind of experience might be incorporated into the professional learning structure we use to support teacher learning.' (America)

'This weekend, I learned a lot. Something interesting was about curriculum, deep and active learning, and student poster session. Learning from other participants through round table discussion also gave me a lot of new insights. What I will try to bring to my country is mostly about reflection and lesson study. I will try to apply it when I go back.' (Indonesia)

And some more reflections about their three-day roundtable experience in Fukui,

'I believe that all of us educators gathers for the past three days appreciate more our respective contexts. These contextual features are different but I am one with the organizers of this conference in making rooms for constructive sharing of best practices and open friendly environment in growing together with our fellow educators. I would like to bring home with me stories of inspiration and hope to improve our education. Kudos to the organizers of this conference. Will you invite us again next year?' (Philippines)

'It is my first time to join the roundtable in English. I noted that Japanese system has good points but it also has to improve more. Roundtable gives us motivation for tomorrow. Talking with people who have different backgrounds give us different point of views and had broadened my horizon. I hope more and more Japanese teachers join in the future! Thank you for this.' (Japan)

'To introduce my practice records to teachers abroad was very rewarding. Firstly, I was able to look over the whole picture of my whole report and extract something very meaningful. Second, I was able to get wonderful feedbacks from quest teachers, and realize that we teachers face similar difficulties and struggle to improve it even though our cultures and backgrounds are different. Finally, it was challenging to do it in English but it was also a good opportunity to practice my English. It was fruitful experience to discuss things with many teachers.' (Japan)

'Thank you so much for providing me with the opportunity to participate in this roundtable. I really enjoyed the past three days and found all of it extremely useful for my professional practice. The practice f lesson study extends the work that we have been doing in Australia and I am inspired to take this collaborative approach back to my college. The day three lesson study was really valuable as it gave me an idea of how this could look in my school. The day 2 panel sessions was also fascinating as I was able to see the challenges of the Japanese teachers also face. Thank you so much for this amazing experience.' (Australia)

'The DPDT organizers were amazing. I liked everything that were in the program. It was really informative and we got the chance to interact with educators around the world. It was an amazing experience.' (Ethiopia)

Indeed, there were a lot of 'thank you's' from the guests but we, in DPDT, are equally grateful for enriching our own practices by learning about theirs. And personally, I don't think this would not have been possible without the brilliant minds of DPDT staff behind it, the generous Japanese teachers who opened their classes and joined the discussions, the awesome facilitators, and Liz!:)







## Continuing International Collaborations

The University of Fukui's Department of Professional Development of Teachers (DPDT) plans to continue many of the collaborations that were fostered in the previous year. This includes hosting the second JICA — University of Fukui Knowledge Co-Creation Program in November 2017 and the second International Round Table in February 2018. Below are a few other collaborations that DPDT plans to continue.

### World Association of Lesson Study Annual Conference

## Yoshiko Hambara, Assistant Professor University of Fukui



Last year, four faculty members and one graduate student from the Department of Professional Development of Teachers (DPDT) of the University of Fukui participated in the World Association of Lesson Study (WALS) Annual Conference in Exeter, United Kingdom. One of the purposes of this conference is to share various Lesson Study practices with different countries. Moreover, it is a venue for educators to discuss their projects with regards to improving educational practices and promoting learning across ages and stature. Yuu Kimura presented his research entitled, 'Sharing Emotions through Lesson Study'; Mai Kishino presented her research on 'Teacher Development in Community Constellations'; myself and Pauline presented our research entitled, 'Cultivation of a Symbiotic Community for Japanese and Foreign Students'. In each of the presentations, we were able to interact with the audience and had productive discussions with them. It was a great opportunity for us to share our practices here in DPDT to those from outside of Japan; at the same time, we learned a lot from other presentations.

To read more about the WALS 2016 Conference in Japanese, please look at Newsletters 90.

This year the WALS annual meeting will take place at the University of Nagoya on November 24-27, 2017. Following the regular conference meeting, the University of Fukui and Fukui Board of Education will host a two-day Lesson Study Immersion Program (LSIP) on November 27-28, 2017. To find out more about the WALS 2017 Conference and Fukui LSIP, please visit http://www.wals2017.com.

### Japan Innovative Schools Network OECD Project

## Elizabeth Sugino Hartmann, Lecturer University of Fukui

The University of Fukui DPDT has been an active partner in the OECD-sponsored Japan Innovative Schools Network (ISN). The purpose of ISN is to connect theory and practice by collaborating with educators and students to consider what new 21<sup>st</sup> century competencies students need and how to support them in developing these competencies.



There are several clusters within Japan, and the Fukui Cluster includes the University of Fukui as well as Wakasa High School, Usui High School, and Fuzoku Elementary and Junior High Schools. The Fukui Cluster is partnered with local Singaporean elementary and secondary schools and the National Institute of Education.

Students and teachers from Japan and Singapore collaborated on project-based learning focused on environmental studies including problems surrounding microplastics and societal issues such as addressing the growing concern of aging populations. Studies and teachers shared their projects via web-based meetings. In addition to the web-based meetings, several teachers from Japan and DPDT members visited

Singapore at the beginning of the partnership two years ago as well as last year. During this spring, students from Wakasa and Fuzoku had the opportunity to visit Singapore and work with their Singaporean peers to continue the research of the projects they presented to each other via the web-based meetings. The students will meet again in August at the OECD student forum in Tokyo. Many Singaporean and Japanese students, as well as students from other clusters, will be in attendance.

The partnership with Singapore through the OECD ISN project has been a wonderful learning experience for Fukui students, teachers, and DPDT educators. We look forward to continuing this partnership.



To read more about the OECD ISN Project events, please look at Newsletters 88 and 90 or visit <a href="https://innovativeschools.jp/en/">https://innovativeschools.jp/en/</a>.

#### **Looking Forward: Continuing International Collaborations**

DPDT is grateful for the opportunities to engage in so many wonderful international collaborations during the past year. Our hope is that these collaborations will not be singular events, but will be part of a network of international professional learning communities supporting teacher and student reflection and learning. In looking forward, many of the projects and events described in this newsletter will continue as annual events or ongoing collaborations. We are excited to continue collaborating with our international partners and eager to foster new collaborative relationships. Below are just a few of the many events and collaborations for the upcoming year.

Upcoming Events	Dates
OECD ISN International Student Innovation Forum 2017, Tokyo, Japan	August 2-4, 2017
Japan – US Teacher Education Consortium (JUSTEC) Annual Meeting, University of Hawaii at Manoa	September 14-17, 2017
Africa Round Table, Location TBD	Fall 2017 (tentative)
JICA – University of Fukui Knowledge Co-Creation Program, University of Fukui, Japan	November-December 2017
World Association of Lesson Study (WALS) Annual Meeting, University of Nagoya, Japan	November 24-27, 2017
WALS Lesson Study Immersion Program (LSIP), Fukui, Japan	November 27-28, 2017
University of Fukui International Round Table, Fukui, Japan	February 2018
International Student Teacher Exchange Program, TBD	TBD
OECD ISN Collaborations with NIE and Singapore K-12 Schools, Various Locations in Singapore and Fukui	Ongoing
International Teacher Training Program (18 Month Exchange for K-12 Teachers), University of Fukui	Ongoing

If you have any questions or comments about this newsletter or DPDT's international collaborations, please contact Elizabeth Hartmann at <a href="mailto:lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-lizabeth-liz