The Global Assembly for Knowledge Democracy in ARNA 2017

Regional Workshop in Mongolia

How does action research methodology advance democratization of education in Mongolia?

April 30, 2017

The first regional workshop of the Global Assembly for Knowledge Democracy was held at the Mongolian National University of Education (MNUE) on April 14, 2017. All the presenters will attend the Assembly virtually and a total of six action research papers were discussed in it. 14, 2017. Academician Jadambaa B. and professor Narantsetseg Dorjgotov co-chaired the discussion and the following papers along with their living posters were presented during the round table discussion.

1. Tenger's (Sky/ Celestial Dome's) action inquiry of nomads ('Action Research in Mongolian nomads' science of weather analysis and forecasting'; western and non-western views of action research) by Jadambaa B., academician and professor, MNUE teacher education adviser and former MNUE president
2. Evaluations of a Child Speech and Language Development Course Using Action Research by Narantsetseg Tsogt, associate professor, Preschool Education, Teachers School, MNUE
3. Effects of MOOC on student motivation by Bolormaa B., English lecturer, School of Social Sciences & Humanities, MNUE
4. Research findings of student teacher's action research learning by Odgerel D., PhD, Oyuntsetseg B., associate professor and Byambatogtokh G.
5. A case study: Contemplation of Action Research by Undergraduate Students at MNUE by Narantsetseg Dorjgotov, professor, vice dean for Preschool Education, Teachers School, MNUE and Javzandulam B., lecturer, Preschool Education, Teachers School, MNUE
6. Experimentation and investigation into key teaching actions, Baigalmaa Ch., associate professor, School of Educational Studies, MNUE

The conversation was led to answer the following questions:

1. How can I/we contribute towards developing transformative action research (AR)?'
2. How can we/I support knowledge democracy based on these projects/my project?
3. How can we (do we) address the democratization of knowledge within our teaching and

research?

These questions were answered in the papers presented by researchers to some extent and some living posters and abstracts are attached in the Appendices 1 & 2. For instance,

Academician Jadamba mentioned that action research is one of the versions of tenger's (Sky/ Celestial Sphere's) action inquiry of nomads. Tenger's action inquiry is a pragmatic version or AR in natural sciences. Depending on their weather observation and experience, Mongolian nomads take their actions to live and adjust their lifestyle to nature. In other words, Mongolian nomads have learnt from their actions or reflections and improved their practices based on previous experiences or lessons they have learnt throughout its history of existence. But, in our current education system, schools are teaching learners how 'not' to live instead of teaching them how to live. Thus AR is needed to improve education quality and satisfy learner needs in a society.

In the paper called the effects of Massive Open Online Courses (MOOCs) on student motivation and engagement in developing English listening skills course for the fourth year students at the MNUE by Bolormaa, MOOCs may be regarded as contributing to the democratisation of knowledge as they are offered for free to any number of people, anywhere and anytime and let students learn at their own pace. In the future, more participatory action research into the relations between student intrinsic motivation and MOOCs is needed in order to improve learning outcomes and explore and enable knowledge democracy in this specific context.

In the conversation titled 'Experimentation and investigation into key teaching actions' by Baigalmaa Ch, she emphasized that teachers still usually conduct traditional research using questionnaire, observations, and literature review methods to initiate conclusions without taking further action. Their investigations also found that teachers lack the depth of knowledge, understanding and attitude for how to conduct the action research cycle; and that action research is conducted without any theoretical baseline nor a scientifically based system. Therefore, teachers do not focus on responding deeply to 'What is an action to be taken?'. MNUE Academician Jadambaa wrote the book "Quantum theory of Action Research" in 2016; the third chapter of his book is reveals 'Action Studies' concept and its theoretical background clearly. She will continue to use the content of this

chapter in her teaching by using his concept “Action” to support future excellence in using action research in Mongolia.

As a result of the discussion, researchers proposed the following actions to be taken in the future at the MNUE. For instance,

- to share learning and teaching experiences of AR
- to have shared understanding of AR terms and equivalents of other educational terms in Mongolian language
- to gather case studies in Mongolian context at every level of education- undergraduate, master, PhD and faculty members
- to collect data for action research
- to compile all these action research works and publish them

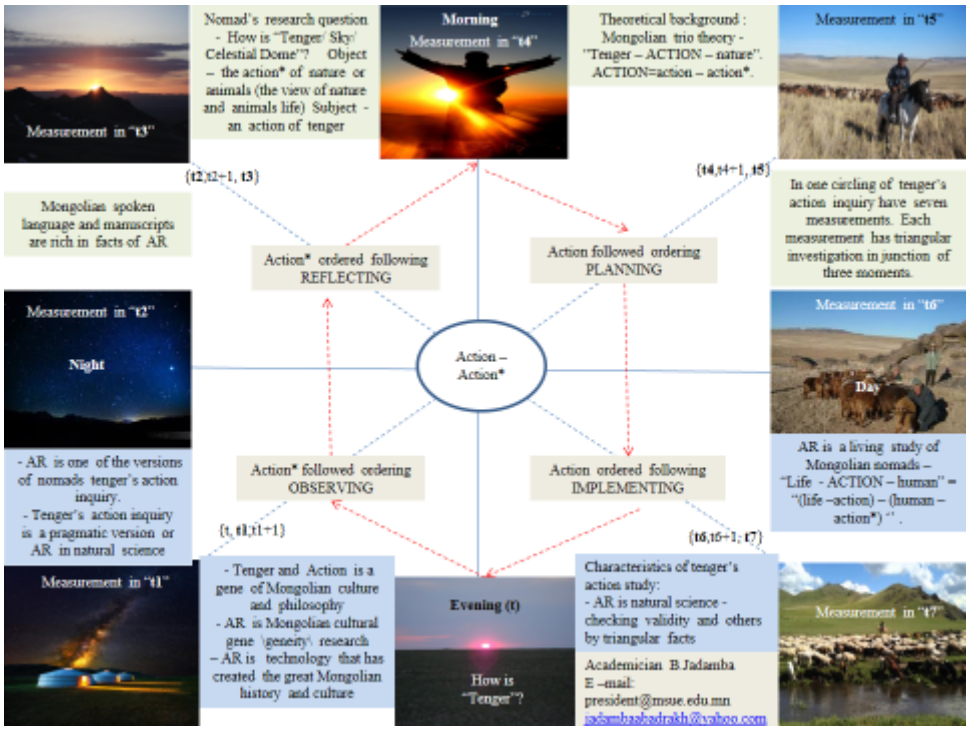
Also professor Jadambaa gifted participants a book called ‘Teachings of Mongolian development based on science’ by a late academician Enkhtuvshin, a former president of Mongolian Academy of Sciences.

In sum, the participants were grateful to ARNA 2017 organizing committee and professor Jadamba for giving an opportunity to share their findings of action research with not only MNUE AR community but also with international educators. We look forward to more collaboration with other action researchers around the globe in the future to learn from each other for our common goal of better educational practices for learners.

Appendix 1. **Living Posters**

Poster 1.

Tenger's (Sky/ Celestial Dome's) action inquiry of nomads (Action research in Mongolian nomads' science of tenger, celestial dome, for weather analysis and forecasting; western and non-western views of action research) by Jadambaa B., academician and professor, MNUE teacher education adviser and former MNUE president



Poster 2.

A CASE STUDY: CONTEMPLATION OF ACTION RESEARCH BY UNDERGRADUATE STUDENTS AT MNUE

NARANTSETSEG DORJGOTOV, PHD, PROFESSOR
JAVZANDULAM BATSAIKHAN, M.A.

A FIRST ONLINE CONFERENCE WITH NMSU,USA

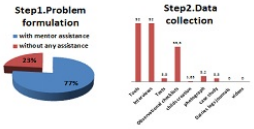
DR.LONNIE ROWELL ONLINE WITH MNUE

Comparison of Western and Nonwestern Views of Action Research

Nonwestern view	Western view
- Principle of uncertainty (undeterminist view)	"…It is a practice based research." Mc. Niff,(2012, p.23)
Nonliner or chaos	"Is a powerful form of education research."(McNiff, 2012, p.24)
- AR contextualized - is nomadic people's living and working basic tools	"Is a real life experiences of real life people Participatory AR is a social process, it is a practical and collaborative, it is a emancipatory and critical." (McTaggar, 1997, pp. 566-567)
- AR cognition– is choosing only ONE from "many" nonegnerative possibilities & ELIMINATES others - AR is for change. Research in change is a dynamic power of practitioners and - Practice based knowledge production is learning through doing. (Jadambaa, 2013)	- Unfreezing, Moving to a new level or changing, Refreezing" Kirt Lewin's Change Theory (1951).

BEST STUDENTS OF ACADEMIC WRITING CLASS BY PROF. CANDACE KAYE

84 students paper on AR



Poster 3.

EFFECTS OF MOOC ON STUDENT MOTIVATION

Bolormaa Batmunkh, MNUE

MOOCs may be regarded as contributing to the democratisation of knowledge as they are offered *for free to any number of people, anywhere and anytime* and let students learn at their own pace.

What can I do to improve my listening?

- Listen to English for 20 minutes a day for 3-6 months!

Purpose: to discover the MOOC effect on student motivation and engagement

Key words: Massive Open Online Courses, motivation, engagement, self-paced learning, knowledge democracy

UNESCO and Commonwealth of Learning. (2016). Making sense of MOOCs. http://unesdoc.unesco.org/images/0024/002451/245122E.pdf

Extrinsic vs. Intrinsic Motivation
Integrative vs. Instrumental Motivation

Students will always stay more motivated if we involve them in enjoyable and challenging activities. However, not all students enjoy or respond to the same things in the same way. It is important for teachers to keep a record of what works and what doesn't (for the class and for individual students). Reflective teachers do this anyway, and it helps them to decide what to do next (Harmer, 2012, p.99).

Two asynchMOOCs used to teach 64-hour Developing Listening Skills Course for 75 fourth year students at MNUE

Inside IELTS by Cambridge English language Assessment on Futurelearn https://www.futurelearn.com/courses/understanding-ielts/6/todo/10410

Understanding IELTS by British Council on Futurelearn https://www.futurelearn.com/courses/understanding-ielts/5/todo/7142

Based on observation, interviews (n=10) and questionnaires (n=37), MOOCs were interesting and they helped students set up better study habits, discipline, and they push their self-study.

Why MOOCs? - In MOOCs, students have control over what is happening in their learning!

When learners have some responsibility for their own learning, they are more likely to be engaged than if they are just doing what the teacher tells them to (Harmer, 2012, p.90)

In the future, more participatory action research into the relations between student intrinsic motivation and MOOCs is needed in order to improve learning outcomes and explore and enable knowledge democracy in this specific context.

Poster 4.

EXPERIMENTATION & INVESTIGATION ON KEY TEACHING ACTIONS

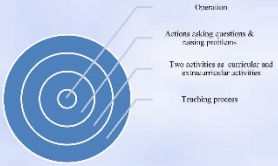
(Practical Action Research)

Baigalmaa Chultem, Associate prof (Ph.D)
Department of Education Studies and Methodology
School of Education Studies
Mongolian National University of Education

Books written by Baigalmaa Ch about action research

Abstract: Teaching and learning are complex relationship. For the last 10 years we (at Mongolian National University of Education) have been interested in conducting action research to improve our teaching learning methodologies; and implementing the results of our teaching activity in content and; teaching strategies. Also, we have studied its implementation by teachers in Mongolian secondary school. . As a result of our decade of research, we have found that teachers know that 1. Teaching is impossible without action research investigation and; 2. They now have general knowledge about information on action research and its importance. However we have found that teachers still usually conduct traditional research using questionnaire, observations, and literature review methods to initiate conclusions without taking further action. Our investigations also found that teachers have lack of depth of knowledge, understanding and attitude for how to conduct the action research cycle; and that action research is conducted without any theoretical baseline nor a scientifically based system. Therefore we have found that the teachers do not focus on respond deeply to 'What is action to be taken?'. MNUE Academician Jadambaa wrote "Quantum theory of Action Research " book in 2016; the third chapter of his book reveals 'Action Studies' concept and its theoretical background clearly. I continue to use the content of this chapter in my teaching by using his concept "Action" to support future excellence in using action research in Mongolia.

- Process – broad and rich content, and continuous for certain duration
- Activities – A set of actions and teaching consists of two activities as curricular and extracurricular activities.
- Action – Unit action and physical, mental and language action
- Operation - Unit movement, motion



Aim: To improve the process of acquiring the ability to plan extracurricular activities of students
Goals: 1. Experimenting possibilities of improving the ability of planning of students
2. Determining/Revealing model strategies of acquiring the ability of planning

№		Action to do	Results
1	Teacher	Improving content of the seminar "Strategies of planning extracurricular activities"	Improved seminar content
2		Organizing seminars on basis of active participation of students (by individuals, in pairs and in groups, in a whole class)	Improved student participation
3	Learner	Experiment 1: Planning after they heard about a presentation on extracurricular activities planning	Planning not meeting requirements
4		Experiment 2: Designing structure, scheme and tables of planning of extracurricular activities and planning according to them	Improved planning quality
5		Experiment 3: Planning after formulating content of planning structure in questions	Improved content of planning structure
6		Sharing planning with peers to improve	Improved planning without mistakes

First stage of experiment in 2015

- Put more questions about planning to improve awareness of planning
- Active students imitate planning of other people
- Students were late to submit their independent works on time
- Most students did planning that did not meet the requirements
- The planning structure was not fully described

We reflected about why the ability of students' planning is not good enough when they were taught the strategies of planning extracurricular activities in the seminar. The presentation information they heard is not enough to learn to do planning. We decided that we need to systematize the information students would hear and we need to help them to create their knowledge. Then we organized the seminar focusing on students' participation and assigned them to design a scheme a model table "Planning structure of extracurricular activities".

A Model Table for Planning of Extracurricular Activities

Planning introduction:			
Topic:	**Framework:**	**Rationale:**	**Principle:**
Title given to the activity	**Interests of students and demand of the society and other stakeholders**	**Necessary demands of organizing the work**	**Norms, rules and regulations to be followed during the activity**
Aim: Expected outcome for students organizing the activity			
Goal: Midterm expected outcome for students organizing the activity			
Content: The nature of the activity to be organized and activities, actions and work to be done by the participants			
Strategies and Activity types: The activity type will be chosen considering the features of participants and the activity. For example: Interviews, debates, visits, community volunteer works, competitions and contests etc. Management styles of students are group works, pair works, and a whole class work etc.			
Stages and Time: Planning time will be set considering the activity content, strategies and types and management of students.			
Activity Guideline: A guideline will be designed for students and other participants. In this, the topic, aim, content, condition, strategy, type, stage, time and assessment will be clearly stated.			
The work materials: The number and amount of materials for each participant will be specifically planned.			
Assessment: A rule and methods of assessing the performance and results of the activity organized will be designed.			

Second stage of experiment in 2016

Strengths	Weaknesses
Planning was completely done considering the structure.	The content for each structure of planning is not accurately determined.
The relationship between each structure of planning is tried to make.	The assessment of planning is not stated.

What were the strengths for the previous experiment? Students did not understand about the planning structure in the previous experiment but this time they have good awareness that the structure need to be followed for planning. As well, students need to understand about what should be included for each structure element. We thought about how to get students understand about it and what ways are appropriate to work with them. Then we decided that if questions are formulated for each planning structure, the answers will be clear and the content will be accurate.

A Model Table for Planning of Extracurricular Activities

/formulated by questions/

№	Planning structure	Content for each structure
1	Planning introduction	A. What will you do? What activities will you organize?
	A. Topic	What topic will you give to the activities you will organize?
	Б. Framework	Б. How does the activity help to provide social needs?
	В. Rationale	В. Why is it necessary for students to do the activity?
	Г. Principle	Г. What are norms, rules and regulation that will be followed by participants?
2.	Aim	What outcome will you reach by implementing the activity?
3.	Goal	What midterm outcome will we reach by implementing the activity?
		What understanding, thinking and beliefs will students/pupils have?
		What abilities and strategies will students study?
		What attitude and behavior will students develop?
		What features of socialization will students develop?
4.	Content	What will you observe, reflect about, study and implement?
		What will participants do?
5.	Method and Type	How will you observe, reflect about, study and implement? (group work, competition, debate, interview, project work etc)
		What methods and types will you use to organize participants? (group work, pair work and class work etc)
6.	Time and stages	How many stages will the activity have? How much time will be allotted to implement each stage?
7.	Guideline	How will you carry out the following as aim, content, condition, method, type and assessment for the activity?
8.	Materials	What learning materials, handouts, equipment and other resources will participants use? How many pieces and how much amount will they need?
9.	Assessment	How and what rule will you use to assess the activity performance?

Third stage of experiment in 2017

After students were given an independent work on planning design, the following was observed.

https://www.youtube.com/watch?v=CqeD4oIitSk&feature=youtu.be

Strengths	Weaknesses
The content of each structure elements was accurately described when students followed the planning structure.	**Who will assess the activity performance?** **When will the activity performance be assessed?** **How will the activity performance be assessed?**

CONCLUSION

When students are doing the assignment of "Planning of extracurricular activities", we identified that learners need to be aware of the action when they do new action that they have not done before.

In order to help students to acquire the ability of planning action, teachers are recommended to work with students using the strategies as analyzing and processing information, guiding them by asking questions and discussing the performance and results to improve.

In addition, we observed that it was effective to design a scheme and a model table for students to acquire the ability of planning action. The most effective action was that students designed reflective questions in order to describe the content for each elements of the planning structure. In other words, the action was guided by 'Reflective questions'.

Students become knowledgeable by performing productive physical, mental and language actions while working with information. And they apply their knowledge in practice. As a result of these actions, students develop their competencies.

Teachers need to involve students in actions to experience and solve problems. In this case, they will have more chances to comprehend what we teach. It is recommended that teachers need to support students to take part in an action to create something and work and work again to improve what they did before. Then students can be able to learn strategies to do planning.

Poster 5.

NARANTSETSEG TSOGT'S LIVING POSTER

I am motivated by

Curious, vibrant preschoolers and my passionate, caring students who will eventually provide primary education in Mongolia.

I am a professor at University of Preschool Education in Mongolia.

This is a platform where I interact with my students outside the classroom: http://childlangmg1.weebly.com/

This is where I am from. A country located between Russia and China and well-known by its nomadic lifestyle.

Thank you Dr. Candace Kaye for scattering the seeds to grow Action Research at the University of Preschool Education.

Curriculum reform at my school. Here I was proposing a curriculum that included action research project.

Aftermath the approval of my new curriculum, I am teaching methods to conduct action research to my students.

Giving feedbacks on conducting action research to a group of my students.

Appendix 2. Action Research Abstracts

Abstract 1.

Mongolian science of tenger, celestial dome, and action research

Jadamba Badrakh, Professor & academician, Mongolian National University of Education

Abstract

This work aims to identify a subject, object, research methods, techniques of Mongolian herders' science of tenger (sky), celestial sphere for weather analysis or forecasting, theorize and summarize them in accordance with respective parts of action research. In order to achieve this goal, I, a humble researcher, studied the sources and facts of science of tenger, celestial dome, analyzed, summarized as well as theorized. Based on the findings, it can be concluded that action research is one version of techniques of celestial dome's action research which formed and developed Mongolian science of celestial sphere analysis and it has spread in social sciences and humanities.

Key words

Sky/ celestial dome, action, action of tenger /sky/, tenger's action analysis, circling, cultural gene, studies of cultural gene, living study, doing work properly…

Abstract 2.

A case study: Contemplation of Action Research by Undergraduate Students at MNUE

Narantsetseg Dorjgotov, PhD, Professor

Javzandulam Batsaikhan, M.A.

Mongolian National University of Education

Abstract

Professional teachers need to be reflective about their own practice (Purevdorj, 2010) and the action research provides the opportunity not just to be reflective but also to make action for change. The course AR 408, Action Research place actual title of course here at Mongolian National University of Education (MNUE) helps pre-service and in-service teachers develop their reflective capacities by providing the opportunity to identify a question about their own teaching practice, review the current research literature, develop a plan to collect data, collect and analyze their data, identify emergent themes, write an action research paper, and present

their project and their findings to the class with their portfolios that include research planning, data, evidences, conclusions and recommendations according to the steps.

The course was piloted by guest professor Dr.Candace Kaye in the 2014 Fall Semester and has been continuing since then at the School of Preschool Education, Teachers School of MNUE. Twelve action research small groups within the 64 undergraduate course were research participants in the study that focused on the students' reflections of their action research experiences, impressions, and future intentions. Preliminary findings include evidences how students overcame difficulties as they doing the research. Specifically, difficulties to get the permission from kindergarten administrations, to find latest publications related to the research topic, and to manage time with the other courses for gathering data from the research fields.

Abstract 3.

Effects of MOOC on student motivation

Bolormaa Batmunkh

Master of Applied Linguistics, the University of Melbourne, Australia

English language lecturer, Mongolian National University of Education

Abstract

This paper discusses the effects of Massive Open Online Courses (MOOCs) on student motivation and engagement in developing English listening skills course for the fourth year students at the Mongolian National University of Education. MOOCs may be regarded as contributing to the democratisation of knowledge as they are offered for free to any number of people, anywhere and anytime and let students learn at their own pace. Observation, interviews and questionnaires reveal that most students find MOOC interesting and it helps them set up better study habits, discipline and it pushes their self-study. In the future, more participatory action research into the relations between student intrinsic motivation and

MOOCs is needed in order to improve learning outcomes and explore and enable knowledge democracy in this specific context.

Abstract 4.

Experimentation & investigation into key teaching actions

Baigalmaa Chultem, Associate professor (Ph.D)
Department of Education Studies and Methodology
School of Education Studies
Mongolian National University of Education

Abstract

Teaching and learning are complex relationship. For the last 10 years we (at Mongolian National University of Education) have been interested in conducting action research to improve our teaching learning methodologies; and implementing the results of our teaching activity in content and; teaching strategies. Also, we have studied its implementation by teachers in Mongolian secondary school.[1]. As a result of our decade of research, we have found that teachers know that 1. Teaching is impossible without action research investigation and; 2. They now have general knowledge about information on action research and its importance. However we have found that teachers still usually conduct traditional research using questionnaire, observations, and literature review methods to initiate conclusions without taking further action. Our investigations also found that teachers have lack of depth of knowledge, understanding and attitude for how to conduct the action research cycle; and that action research is conducted without any theoretical baseline nor a scientifically based system. Therefore we have found that the teachers do not focus on respond deeply to 'What is action to be taken?'. MNUE Academician Jadambaa wrote "Quantum theory of Action Research[2]" book in 2016; the third chapter of his book reveals 'Action Studies' concept and

[1](Baigalmaa Ch., Enkhbayar Lk., 2015)Implementation of action research of Mongolian teachers, Филологическое образование в современных условиях, Международная научно-крактическая конференция, 274-280 лист

[2]Жадамбаа.,Б (2016) Үйлийн судалгааны квант онол. Улаанбаатар. Гэрэлт сударХХК

its theoretical background clearly. I continue to use the content of this chapter in my teaching by using his concept "Action" to support future excellence in using action research in Mongolia.

Abstract 5.

EVALUATIONS OF CHILD SPEECH AND LANGUAGE DEVELOPMENT COURSE PROJECT WHICH INCORPORATED ACTION RESEARCH

Narantsetseg Tsogt, Associate professor, Mongolian National University of Education

Abstract

Action research approach is a fairly new phenomenon in Mongolian educational system, particularly at the School of Preschool Education where I have been teaching for the last 20 years. From 2014, I started trying to engage my students in practicing progressive problem solving approach to their teaching and interaction with the classroom. I incorporated an overview of action research in my Child Speech and Language Development course and asked my students to practice what they learned during their internship. Students followed the steps of action research in their final project and made an effort improve their teaching. The steps started with an identification of problem followed by making of literature review, planning research strategy, gathering data, making analysis, sharing their findings with the group members and finally it ends with taking some actions accordingly.

The purpose of this research is evaluating students' improvement in teaching after introducing action research methodologies in their final project. From 2014 to 2016, I have collected total of 45 student projects that utilized action research in their teaching process. I formulated a checklist to evaluate students' project when incorporated an action research with earlier projects that did not include any action research. The result showed significant improvement in students' skills at identifying problem and approaching the problem methodologically to take appropriate actions.