



มหาวิทยาลัยขอนแก่น
KHON KAEN UNIVERSITY

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“Paths to high qualified teacher education and training: issues and actions”
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Capacity Building for Teacher Training
: Experience Sharing from KKU-Thailand

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Topics for today

- Capacity building for teacher education/teacher training
- Experience sharing from KKU-Thailand

Capacity building for teacher education/teacher training

Boyd, Kim & Murray (2007) in *“Becoming a teacher educator: guidelines for the induction of newly appointed lecturers in initial teacher education”* mentioned about

- to improve the induction of new the **university-based teacher educators**
- the focus should be on the **interactions** between **individuals** and the **workplace culture**

<<<EXPANSIVE learning environment	RESTRICTIVE learning environment >>>
Close collaborative working	Isolated, individualist working
Colleagues mutually supportive in enhancing teacher learning	Colleagues obstruct or do not support each others' learning
An explicit focus on teacher learning, as a dimension of normal working practices	No explicit focus on teacher learning, except to meet crises or imposed initiatives
Supported opportunities for personal development that goes beyond institutional or government priorities	Teacher learning mainly strategic compliance with government or institutional agendas
Out of institution educational opportunities including time to stand back, reflect and think differently	Few out-of-institution educational opportunities, only narrow, short training programmes
Opportunities to integrate off the job learning into everyday practice	No opportunity to integrate off the job learning
Opportunities to participate in more than one working group	Work restricted to one departmental team within one institution
Opportunity to extend professional identity through boundary crossing into other departments, institutional activities, other institutions, subject networks and beyond	Opportunities for boundary crossing only come with a job change
Support for local variation in ways of working and learning for teachers and work groups	Standardised approaches to teacher learning are prescribed and imposed
Teachers use a wide range of learning opportunities	Teachers use narrow range of learning approaches

Figure 1. Continuum of expansive–restrictive learning environments for HE teachers

Moreover, this book also mentioned

- **the school-based** role of a teacher educator is a very explicit site for the emergence of the tension that exists within initial teacher education as a subject discipline between educational theory (propositional knowledge) and practice (procedural knowledge and practice-based theory).
- **partnership in pre-service courses** is a complex idea in part because, as Furlong et al. (2005) state, at its heart is ‘the complexity and contestability of professional knowledge’ (p.19).

- Murray and Vannassche (2019) stated that teacher education is often positioned as **research-informed** or **research-based**, and teaching and research are often portrayed as synergistic in teacher educators' work and identities.
- And yet, **research and teaching may also be viewed as separate or even competing activities.**

OECD



- As education systems increasingly respond to **new societal, economic** and **digital needs**, schools are on the front line of change. In order to respond to these changes, systems across the OECD are increasingly focusing on **building capacity for their schools and teachers**.
- focuses on two specific elements that are crucial to effective delivery of policy and practice: **teacher education and partnerships**. It provides a rich set of country examples of policies aimed at **building teacher skills, focusing on the digital skills and emotional well-being of their students**. It also highlights **innovative cases of partnerships across the spectrum of actors**



ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

Building the capacities of teachers and teacher trainers

SDG

This project contributes to SDG4 achievement by expanding ICT blended smart learning innovations worldwide through

- International cooperation for teacher training in developing countries, especially least developed countries and small island developing States to increase the supply of qualified teachers;
- Networking South-South-North of experts and academics in Africa, Latin America and Caribbean, Europe, Asia and Pacific to enhance the capacities of educators and professionals;
- Promotion in Member States of the implementation of a holistic vision of curriculum, teacher education and training to achieve quality inclusive equitable education and learning societies;
- Creating a global forum/platform for coordinated global movement for production and sharing of knowledge, information and innovative practices in teacher effectiveness, as well as smart and personalize learning capitalizing on innovative practices;
- Supporting country-level capacity development activities targeting teachers, teacher trainers and curriculum specialists and developers;
- Implementation of a Global Masters in Education in curriculum design and development with the participation of countries in Arab, Africa, Latin America and Caribbean, East Europe and East Asia and Pacific regions, focusing on technology-backed innovations in education to achieve quality, equity, inclusion and lifelong opportunities for all by increasing the number of quality educators globally.

Experience sharing from KKU-Thailand



**NATIONAL STRATEGY:
2018 – 2037**

Common Skills

- CS 1: Organizational Transformation in Digitalization Skills
- CS 2: Digital Literacy and Data Skills
- CS 3: Social and Humanitarian
- CS 4: Basic and Advanced Cognitive Skills
- CS 5: Digitization and Digitalization Skills
- CS 6: Digital Technological
- CS 7: Phygital (Physical and Digital) Customer Experience Skills
- CS 8: Survival and Growth Business Skills/ Sufficiency Economy

Technical Skills

- TS 1: Smart Automation/ Environment Soft/ Hard Skills
- TS 2: Data Scientist/ Engineer Skills
- TS 3: AI/Deep Learning Skills
- TS 4: Digital Teaching and Learning Skills
- TS 5: Coding and Application Developing Skills
- TS 6: Entrepreneurship for Startup Skills
- TS 7: Digital Marketing and Management Skills (+Logistics)
- TS 8: Health Care and Well Being Technological Skills
- TS 9: Foodology and Farmology Skills

Industry 4.0

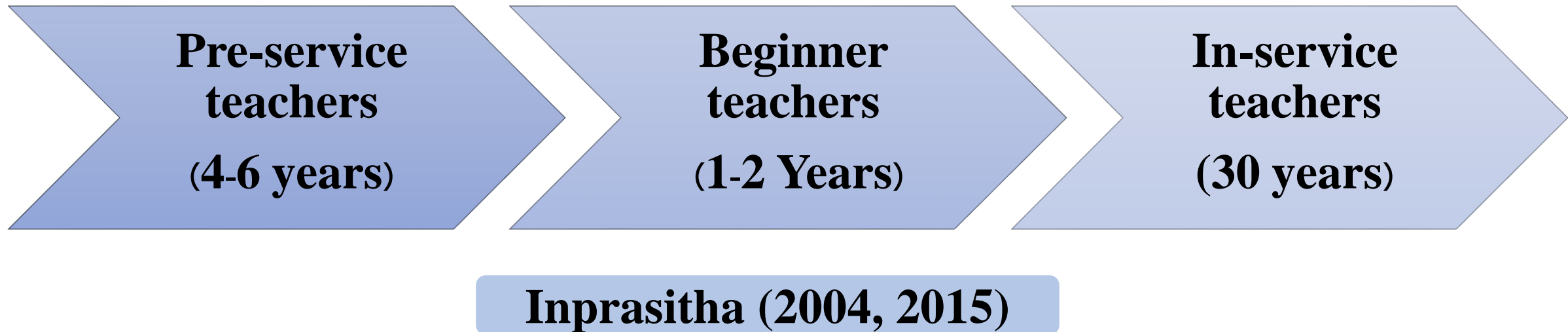
Artificial Intelligence (AI)

Hard Skills and Soft Skills

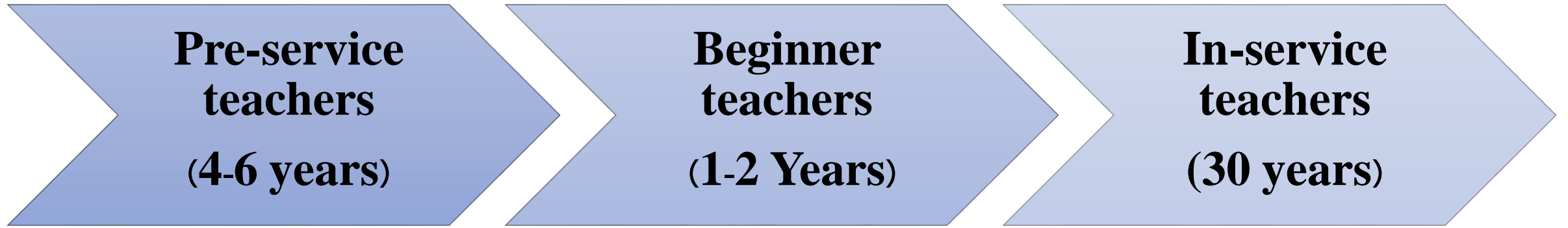


Bundit Thipakorn (2021)

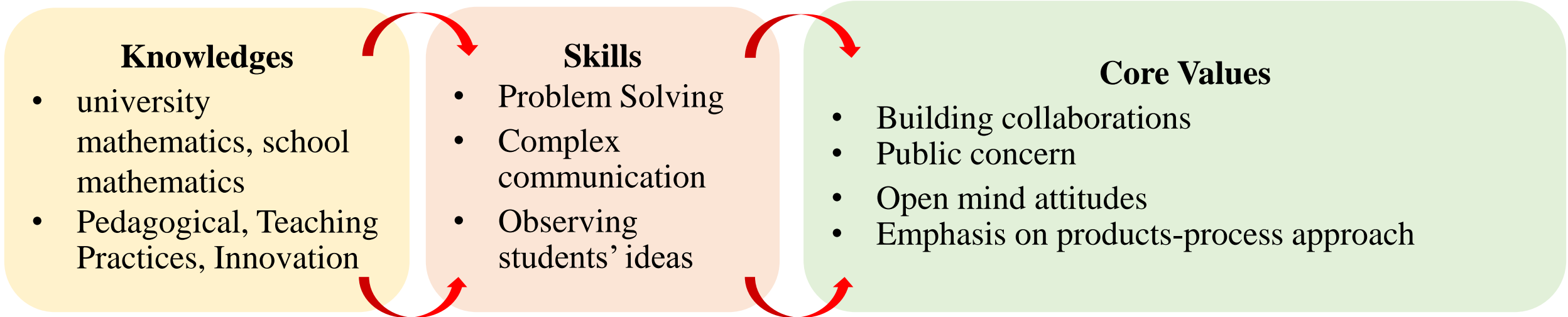
Capacity Building for Teacher Education/ Teacher Training



Faculty of Education in school, School-based training



Faculty of Education in school, School-based training



Inprasitha (2004, 2015)

Initiative Courses

Y 1

Y 2

Y 3

Y 4

GE
30
credits

Total
133
credits

Specific
Subjects
97 credits

Elective
Subjects
6 credits

Languages---12 credits

Sciences and Mathematics---15 credits

Humanities and Social Sciences---3 credits

GE 341 511
Computational &
Statistical
Thinking in Digital
Era

GE 341 512
ABCD: Digital
Innovation for Life

Y 1-First Semester

Y 1-Second Semester

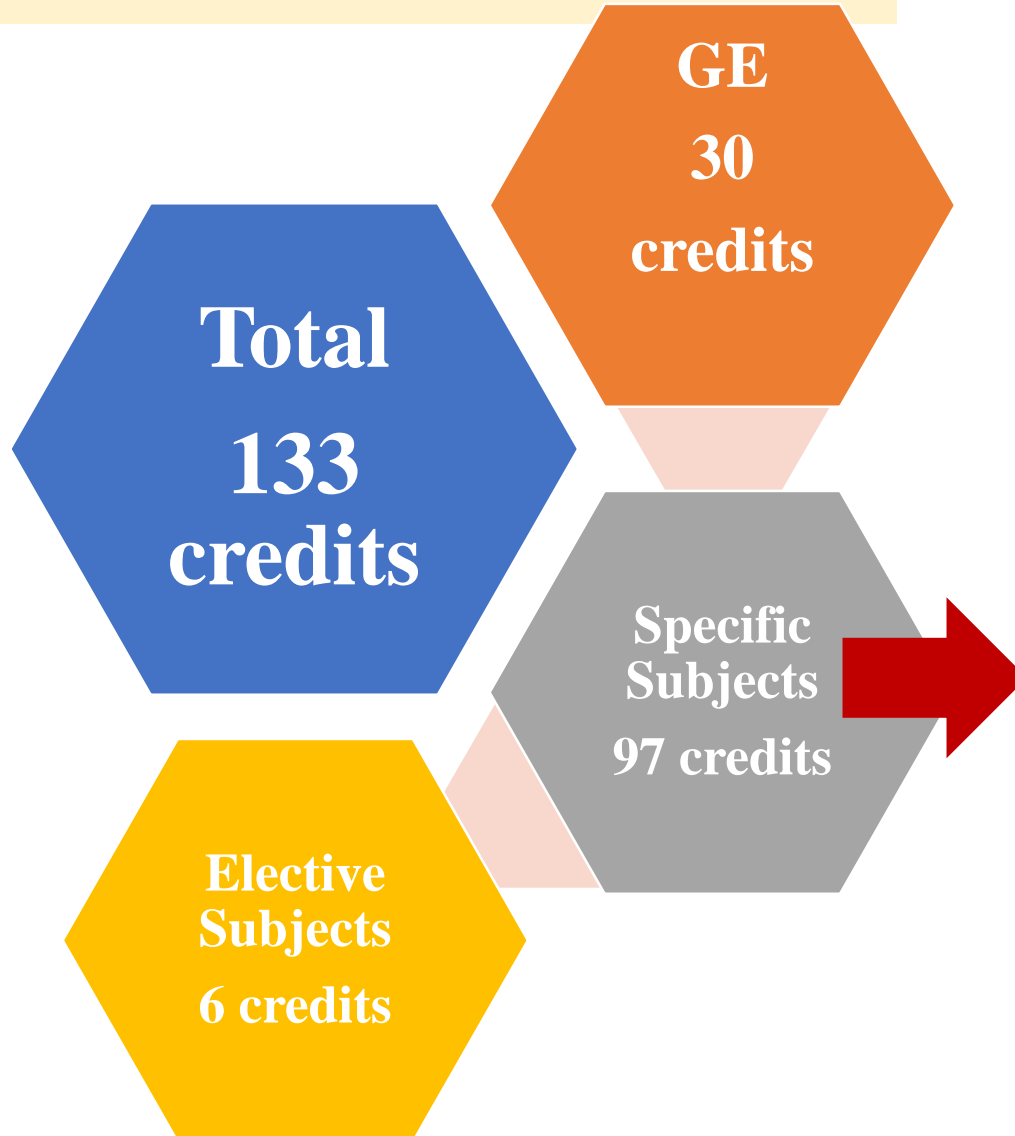
Initiative Courses

Y 1

Y 2

Y 3

Y 4



School Mathematics

- Numbers and Operations in School Mathematics
- Algebra in School Mathematics

University Mathematics

- Calculus for Physical Science I
- Linear Algebra I

Mathematical Process

- Proficiency in Conceptual Understanding Through Problem Solving
- Proficiency in Procedural Fluency

Faculty of Education in school, School-based training



Pre-service teachers studied textbooks, did the lesson plan, observed a classroom, and did a micro teaching



Faculty of Education in school, School-based training




School principal, in-service teachers, pre-service teachers, university lecturer observed in the classroom and then reflected the classroom.

Faculty of Education in school, School-based training

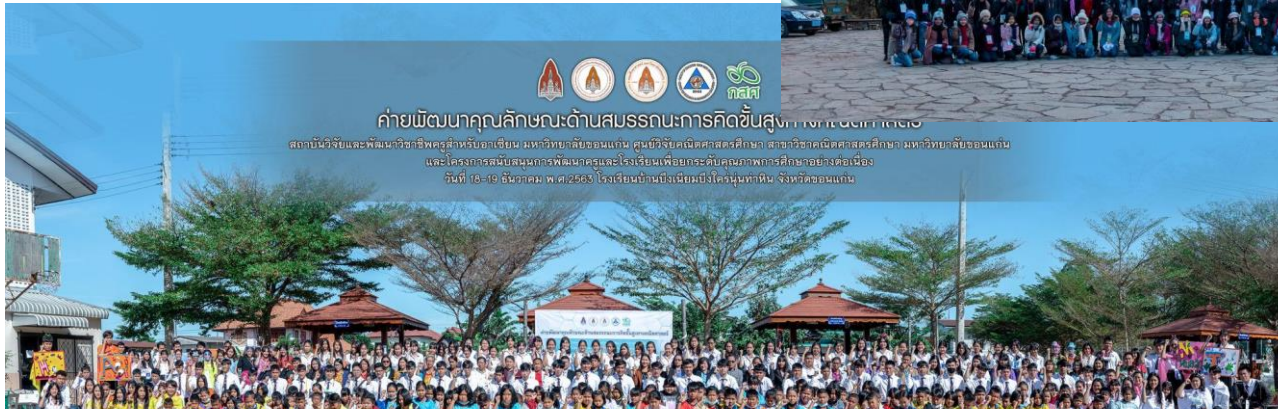


Core Values





 สัมมนาสาขาวิชาคณิตศาสตร์ศึกษา เพื่อเสริมสร้าง เพิ่มพูนประสบการณ์และศึกษาดูงานในโครงการ
 พัฒนาคณาจารย์เพื่อเสริมสร้างอัตลักษณ์ ค่านิยม และคุณลักษณะอันพึงประสงค์ของความเป็นครู
 สาขาวิชาคณิตศาสตร์ศึกษา และศูนย์วิจัยคณิตศาสตร์ศึกษา คณะศึกษาศาสตร์ มหาวิทยาลัยขอนแก่น
 ครั้งที่ 13 ปีการศึกษา 2561 ณ ประเทศไทยและสาธารณรัฐประชาชนจีน ระหว่างวันที่ 19 - 24 มกราคม 2562





 ค่ายพัฒนาคุณลักษณะด้านสมรรถนะการคิดขั้นสูง (High Order Thinking Skills)

 สถาบันวิจัยและพัฒนาวิจัยครูสำหรับอาเซียน มหาวิทยาลัยขอนแก่น ศูนย์วิจัยคณิตศาสตร์ศึกษา สาขาวิชาคณิตศาสตร์ศึกษา มหาวิทยาลัยขอนแก่น

 และโครงการสนับสนุนการพัฒนาครูและโรงเรียนเพื่อยกระดับคุณภาพการศึกษาอย่างต่อเนื่อง

 วันที่ 18-19 ธันวาคม พ.ศ.2563 โรงเรียนบ้านวังเดียนศรีโพนพิบูลย์ จังหวัดขอนแก่น





The 2nd Mathematics Festival Thailand 2020

 ความร่วมมือระหว่างประเทศรัสเซียและประเทศไทย โดยฝ่ายการศึกษาและบริการวิชาการ

 ศูนย์วิจัยคณิตศาสตร์ศึกษา และสถาบันวิจัยและพัฒนาวิชาชีพครูสำหรับอาเซียน มหาวิทยาลัยขอนแก่น

 วันที่ 19 ธันวาคม พ.ศ.2563

 ณ สถาบันวิจัยและพัฒนาวิชาชีพครูสำหรับอาเซียน มหาวิทยาลัยขอนแก่น