

## Topic 2: New Educational Formats: Competency-Based Curriculum and Alternative Education

*By 1. Ms. Wongduan Suwansiri*

*Deputy Director of Bureau of Education Sandbox, Office of the Basic Education Commission*

*2. Ms. Chotima Noopick*

*Deputy Director of Bureau of Academic Affairs and Educational Standards, Office of the Basic Education Commission*

### Curriculum Vitae



**Name:** Miss Wongduan Suwansiri

**Current Position:**

- Deputy Director of Bureau of Educational Innovation Area (Education SandBox), Office of the Basic Education Commission (OBEC), Ministry of Education (MOE)
- Senior Academic Officer, Bureau of Academic Affairs and Educational Standards, OBEC, MOE

**Educational Qualifications:**

- Studying Doctor of Philosophy Programme in Applied Behavioral Science Research at Srinakharinwirot University, Thailand.
- M.Ed., Early Childhood Education, Chulalongkorn University, Thailand.
- Singapore govt. scholarship: Education Transformation for Policymakers: The Singapore Experience at NIE) and Train the Trainer in Early Childhood Development and Education at SEED Institute
- Japanese govt. scholarship: Outdoor Education, Yamanashi University
- Swedish govt. scholarship: Environmental Education and Sustainability at Ramboll Natura AB (Sweden) and Center for Environmental Education and Development (India).
- UK's Youth Sport Trust and British Council: Train the Trainer in Youth Leadership.

**Experiences:**

Ms. Wongduan Suwansiri is a teacher educator by profession of the Ministry of Education, Thailand. She has more than 20 years of experiences in school and community-based projects with a strong Sustainable Development Goals (SDGs) and Education for Sustainable Development (ESD) of the basic education. In this perspective, she has been involved with ESD experts at Asia-Pacific Cultural Centre for UNESCO (APCCU) in Innovation Program on ESD. As a project manager of "Child Friendly Schools: CFS", she has organized and facilitated international training courses for educators from Asia, Africa, and Eastern Europe. CFS is now a model of the Child Rights-Based Education of UNICEF. Ms. Wongduan also develops and conducts the international youth leader training program for ASEAN, including the training the master trainers for youth leadership programs on sports leadership and SDGs leadership nationwide. Currently, she has involved in the Southeast Asia – School Leadership Program me (SEA-SLP) as the country coach and country facilitator which is provided an online platform and onsite training by SEAMEO INNOTECH and a member of SEA-ECDP Working Group SEAMEO RECFON. She is also a core team member of MOE for developing the Competency-Based Curriculum and serving as a member of the Princess Maha Chakri Award Foundation (PMCAF)'s Assistant Secretary and International Affairs Committee which is an international award for outstanding teachers in 11 countries of Southeast Asia, Bangladesh, Bhutan, and Mongolia.

## Curriculum Vitae



Chotima Nooprick is director of gifted education development unit, Bureau of Academic Affairs and Educational Standards, Office of the Basic Education Commission Ministry of Education, Thailand. She graduated Ph.D. in Curriculum and Instruction from Silpakorn University. Currently, she is working in the gifted education, STEM Education. Her interesting research includes study of Curriculum, teaching and learning, teacher training and assessment in gifted education. She worked on the 15 research projects as head of funded research projects. He published papers in the international around 15 papers.

### **Education History**

Bachelor of Education Bachelor of Education (Mathematic) (Nakhon Si Thammarat Rajabhat University).

Master of Education Master of Education (Educational Measurement) Faculty of Education, Thaksin University.

Doctor of Philosophy Doctor of Philosophy (Curriculum and Instruction) Faculty of Education, Silpakorn University.

### **Professional Experience**

#### **Peer-reviewed Journals**

Chotima Nooprick. "Development of an assessment system in mathematics instruction for seventh grade students". International Association for Educational Assessment 36 th Annual Conference , August (2010) ,Thailand.

Chotima Nooprick. "The Development of the Teachers and the Supervisors Capacity on Assessing Technique for Learning Enhancement". International Conference on Education " Achieving Excellence in Innovation and Research for ASEAN Collaboration" 2 nd , August \*(2014) ,Faculty of Education ,Silpakorn University.

Chotima Nooprick. "Research and development model of assessment for learning : questioning and feedback for learning development to enhance student in basic education". International Conference Curriculum Instruction and Supervision : Art Science and Technology toward the Education Quality and Creativity Civic for the 21st Century (14-15 January, 2016). Faculty of Education ,Silpakorn University.

Chotima Nooprick. "Lesson study : enhancing teaching and learning on mathematical problem solving". International Conference Materials on Education and technology Research and Innovation (ICE-TRI) , August \*(2016) ,Faculty of Education ,Silpakorn University.

**Conference presentations**

International Conference on Science and Mathematics Education: CoSMEd 2017", Penang, Malaysia: Research and Development Model of Assessment for Learning: Questioning and Feedback for Learning Development to Enhance Student in Basic Education".  
ASEAN-Russia Forum on Education, October 21 – 22, 2019. Session : "Best practices in Basic Education". Moscow State Institute of International Relations ZMGIMO University).

Address: 151/1365 The trust Residence Pinklao, Borommaratchachonnani Road, khwaeng Arun Amarin, Khet Bangkok Noi, Bangkok

Mobile: +66 89 293 5331

Email: chotima4@hotmail.com Office: Bureau of Academic Affairs and Educational Standards, office of the Basic Education Commission, Ratchadamnoern Nok Road, Dusit, Bangkok.

## The Competency-Based School Curricula in Educational Innovation Areas (SandBox Area)

Wongduan Suwansiri  
Deputy Director of the Bureau of Educational Innovation Area  
Office of the Basic Education Commission (OBEC), Thai MOE

### The Educational Innovation Area Act B.E. 2562 (2019)

The Educational Innovation Area Act B.E. 2562 (2019), also known as the Education Sandbox Act, established the Bureau of Educational Innovation Area. This bureau is responsible for overseeing the Education Sandbox Project, which serves as an experimental area for piloting research, action, and reform in education provision and administration. The goal is to support the creation of educational innovations in accordance with the enactment of The Educational Innovation Area Act B.E. 2562 (2019) across 20 provinces around the country. The project aims to expand successful practices that can be applied to educational institutions nationwide and to develop policy recommendations for the transformation of basic education in the country.

**Section 5:** Educational Innovation Areas are established for the following purposes:

1. To invent and develop educational and learning innovations to enhance the academic achievements of students, and to expand these innovations to be used in other basic education institutions.
2. To reduce educational disparities.
3. To decentralize and provide autonomy to educational agencies and pilot schools in the Educational Innovation Areas to increase flexibility in administration and educational management, thereby improving quality and efficiency.
4. To create and develop mechanisms for collaborative educational management among government sectors, local administrative organizations, private sectors, and civil society within the Educational Innovation Areas.

The use of school curricula is outlined in Sections 20 and 25, granting pilot schools the freedom to use the following **4 types of curricula**:

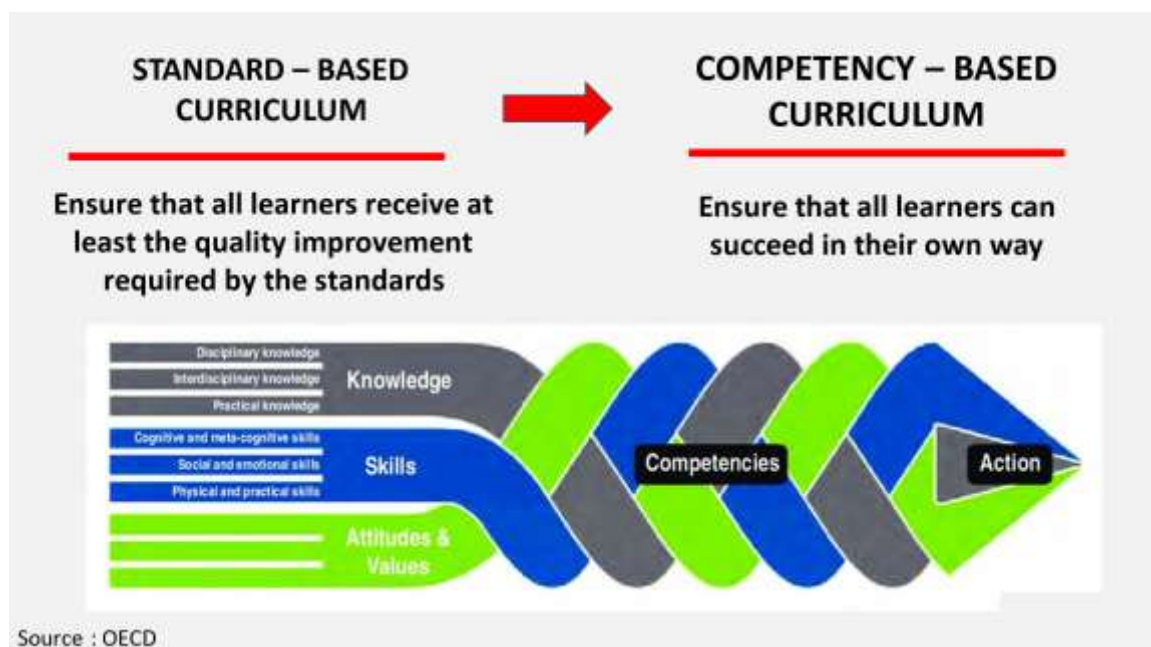
1. **The Basic Education Core Curriculum B.E. 2551, revised in B.E. 2560**, as adapted and approved by the Provincial Educational Innovation Area Steering Committee. The adapted curricula must cover the core competencies of students, the desirable characteristics, and the learning standards of the Basic Education Core Curriculum B.E. 2551.

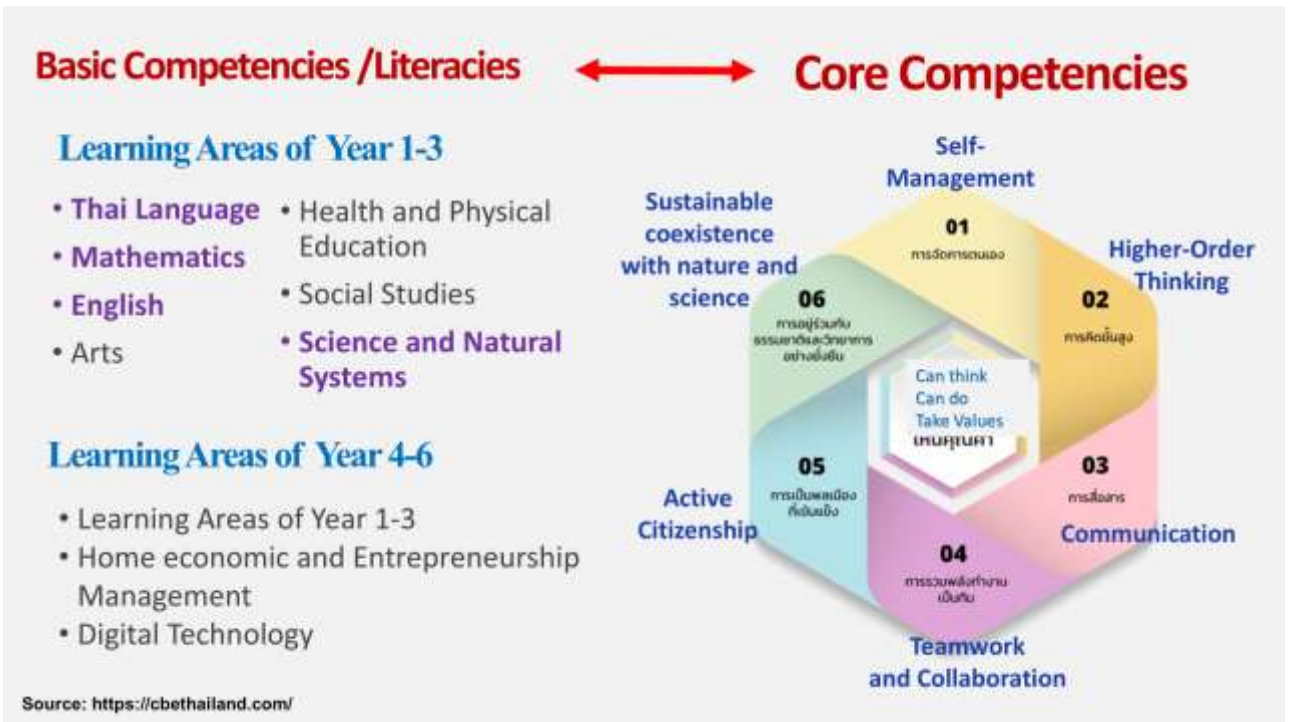
These curricula should integrate a diverse range of learning content that addresses the abilities, aptitudes, and interests of students, as well as the local social context, including the use of active learning processes.

2. **Additional curricula adapted by pilot schools**, based on those already approved by the Provincial Educational Innovation Area Steering Committee.
3. **Alternative curricula selected by pilot schools**, which do not align with the curriculum outlined in Section 20, Paragraph 4. Other curricula that pilot schools wish to use for teaching, instead of the curriculum specified in Section 20(4), are considered curricula under Section 25, Paragraph 4. On September 21, 2020, the Policy Committee for Educational Innovation Areas has approved a resolution allowing pilot schools to **apply the principles of competency-based curricula**, as well as to use innovations or new concepts to experiment and develop their own school curricula. Additionally, pilot schools are permitted to adjust their teaching methods and assessment processes to align with these curricula.
4. **International curricula** fall under Section 25, paragraph 4. If pilot schools wish to use an international curriculum, they must submit it to the Educational Innovation Area Steering Committee to seek approval from the Policy Committee for Educational Innovation Areas.

However, freedom to use the school curriculum must follow the Section 26 “In the implementation of Section 25, the Provincial Steering Committee or the Pilot Schools, as the case may be, must ensure that the opinions of students, parents, teachers, and educational personnel, local administrative organizations, representatives from the private sector, and representatives from civil society in the Educational Innovation Area are taken into account.”

## Competency-Based School Curriculum (CBSC)





### The autonomy of pilot schools in implementing curricula according to the Act.

Competency-Based School Curriculum Implementation in School & Classroom:

1. Study and analyze information regarding the problems and needs of Schools /the educational institution, students, and context to decide on the type of curriculum required.
2. Develop the school curriculum collaboratively with school personnel, supported by academic supporters such as scholars, experts, advisors, educational supervisors, coaches, knowledgeable individuals, experienced people, and other relevant parties.
  - Study, learn, and build understanding about the process and methods of curriculum development from various sources of knowledge.
  - Draft the curriculum by school personnel.
3. Present the curriculum for feedback from students, parents, teachers, educational staff, local administrative organizations, private sector representatives, and representatives from the civil society in the educational innovation area (as specified in Section 26), then refine the curriculum to completeness.
  - For Type 3 and Type 4 curricula, presentation to the Educational Innovation Area Policy Committee for approval is required before implementation.
4. Manage the implementation of the curriculum at the classroom level.
  - Build mutual understanding among curriculum users.

- Manage the implementation of the curriculum, including creating course structures, learning units, projects, activities, scheduling, grouping students, assigning teaching loads, organizing learning ecosystems, allocating resources, and arranging supplementary activities.
- Develop a support system for teacher learning and the development of relevant personnel.

5. Establish an **internal quality assurance system** within the school and regularly assess the educational outcomes of students and the quality of education in the school each year, according to the criteria and methods set by the Educational Innovation Area Policy Committee (Section 37). Schools with student outcomes meeting the criteria set by the committee will be considered to have passed **the external quality assurance** according to national education laws.

### **Educational Quality Assurance**

**Section 37:** Pilot schools are required to establish an internal quality assurance system and conduct regular evaluations to measure student academic achievement and assess the quality of education within the school on an annual basis, in accordance with the criteria and methods set by the Policy Committee. Pilot schools must report the results of these evaluations and internal quality assessments to the Provincial Steering Committee. The Steering Committee is responsible for providing consultation, assistance, and recommendations to the schools to ensure continuous development of their educational quality assurance.

**Section 38:** Pilot schools that meet the student academic achievement criteria established by the Policy Committee are considered to have passed the external quality assessment as required by the National Education Act.

If a pilot school does not meet the student academic achievement criteria as stated in the first paragraph, the Steering Committee shall request that the Office for National Education Standards and Quality Assessment : ONESQA (Public Organization), or other agencies, organizations, or institutions with expertise in education quality certification and assessment, provide recommendations to the pilot school on how to improve its educational quality and inform the Provincial Steering Committee of these efforts.

## **Internal Quality Assurance System of Educational Institutions**

### **Preparation:**

1. Study the annual educational outcomes, analyze strengths, weaknesses, problems, and causes, and establish improvement strategies. Raise awareness and understanding of the principles of internal evaluation.
2. Stakeholders collaborate to set development goals that align with the context and needs, focusing on educational quality and innovation.

### **Development of educational quality management system in 4 Quality Management (QM)**

- QM1: Develop the curriculum, teaching, and assessment systems, and create the annual action plan.
- QM2: Develop and enhance the teachers' professional learning community system.
- QM3: Develop and enhance the academic support system.
- QM4: Develop and enhance the general support system.

### **Auditing, evaluating and improving the educational quality management system**

1. Conduct regular reviews, evaluations, and improvements to the educational quality management system throughout the academic year.
2. Summarize and report the results to the Provincial Steering Committee and disclose them to all parties at the end of each academic year.
3. Use the results of the reviews and evaluations to improve the educational quality management system.
4. The Provincial Steering Committee provides consultation, recommendations, support, and assistance to the educational institution.

## **Eternal Quality Assurance System of Educational Institutions**

According to the provisions of the Educational Innovation Area Act B.E. 2562 (2019) and the announcement of the Policy Committee, the following terms have been defined.

**Educational Achievement** refers to the development of students in terms of knowledge, competencies, skills, and attitudes.

**Basic Competencies or Specific Competencies** refer to competencies in basic literacy, including **Thai language, English language, mathematics, and science**.

**Core Competencies** refer to general competencies that can be broadly applied to various situations. These competencies help individuals succeed in learning, practical work,



problem-solving, and life. Examples include competencies in learning, thinking, teamwork, and citizenship, considering the Desired Outcomes of Education (DOE) and the local context.

**Pilot Schools** will be assessed based on the following educational achievement criteria:

1. All students must achieve at least 50% in two areas of basic competencies and at least 40% in the remaining two areas, except for special education students. (Thai language, English language, mathematics, and science)

2. All students must achieve at least two areas of core competencies at the "**expecting**" level in each grade band, which is divided into four levels: beginning, developing, **expecting**, and exceeding expectations, except for special education students.

3. The Provincial Steering Committee will evaluate the educational achievement of students in accredited schools every three years

## The Results

### Feedback and Suggestion for Competency-Based School Curriculum development

#### Criteria 1: Concepts, Basic Information, and the Process of Developing a Competency-Based School Curriculum

- The school has made significant efforts in developing its school curriculum by thoroughly studying the concepts and basic information relevant to the school's context. There is a good analysis of various resources, highlighting the strengths in the school's and area's context. However, the curriculum lacks completeness in linking these aspects to the students, with the presentation often segmented without clear connections. Some areas have clearly defined provincial outcomes, but the specific outcomes for individual schools are not as apparent. Additionally, some schools need to enhance the information on the curriculum development process, reflecting the participation, commitment, and creativity of all sectors involved, aligning with the intent of the Educational Innovation Area Act B.E. 2562 (2019), Section 26.

- The school's concepts and basic information should be consistently related to the school's focus, curriculum structure, subjects, course descriptions, and assessment methods.

#### Criteria 2: School Goals and Missions

- In reviewing the alignment of the school's philosophy, focus, vision, and goals, more explanation should be added to show the connection and how it leads to the students

through the curriculum structure, subjects, course descriptions, and the institution's assessment methods. It has been observed that the vision statements of some schools are written more like slogans.

### **Criteria 3: Competency-Based School Curriculum Framework**

- Schools have designed a variety of subjects, but in some cases, the subjects do not align with the school's priorities.
- In some schools, course descriptions may need to be better understood and written more accurately. While some schools have written integrated subjects well, they often do not reflect true integration, instead being separated by subject groups. Additionally, course descriptions should cover assessment and evaluation methods.
- Most schools have learning outcomes at the grade level documented in the curriculum, but they need to include learning outcomes at the grade span level, which are the targets for students to achieve by the end of each span.
- The allocation of instructional time should ensure that the proportion of time for core subjects and/or integrated subjects aligns with the stipulated requirements.

### **Criteria 4: Competency-Based Learning Approaches**

- Most schools have strategies/ methodologies for competency-based learning management that enhance students' competencies, using principles and theories of Competency-Based Instruction (CBI) as a framework. They have set up integrated learning, individualized student development, and more tangible innovations. However, some schools still lack clear competency-based learning methodologies, which should be added to provide clear guidelines.

### **Criteria 5: Competency-Based Learning Assessment and Evaluation**

- The assessment and evaluation processes are generally based on broad principles and concepts defined by the school. However, schools need to provide more detailed and specific guidelines for their institutions to ensure clarity and comprehensiveness. Emphasis should be placed on providing feedback from teachers to students, enabling the practical application of assessment and evaluation at the classroom level. Additionally, the process should align with the regulations outlined in the Announcement on the Criteria for Assessing the Academic Achievement of Students in Pilot Schools, B.E. 2564 (2021).
- Most assessment and evaluation processes currently focus on separately evaluating knowledge, skills, and attitudes, rather than assessing these aspects holistically in relation to student competencies. There is also a lack of connection to real-life applications.

Some schools continue to base their student achievement assessments on the Basic Education Core Curriculum B.E. 2551 (2008).

### **Criteria 6: Competency-Based Curriculum Management**

- Overall, the planning and methods for quality assurance in education are unclear and lack connection to the educational quality assurance framework as per the Announcement on the Criteria and Methods for Internal Educational Quality Assurance of Pilot Schools, B.E. 2564 (2021).

- Managing collaborative networks reflects the involvement of all relevant parties; however, there is insufficient information to illustrate the connection between the curriculum and the community, locality, and parents.

- Details regarding curriculum management, such as student development methods or steps, need to be made clearer and more specific.

- Schools are often confused between learning innovations and educational management innovations, frequently applying learning innovations as educational management innovations.

### **Criteria 7: Classroom Curriculum**

- Some schools lack examples of learning units and competency-based learning lesson plans, which are essential for demonstrating the connection between the competency-based curriculum and classroom implementation, as well as the alignment between the school curriculum and the classroom-level curriculum. In the existing learning units and lesson plans in some curricula, It has been observed that the emphasis of learning outcomes and assessments is predominantly on knowledge acquisition, rather than on a comprehensive evaluation that incorporates situational or problem-based tasks supported by observational behavioral evidence.

### **Other Recommendations**

- Support and assistance in developing competency-based school curricula in the form of research and development that leads to practical classroom application should be encouraged. Improvements should be made continuously through various channels, such as knowledge exchange, lesson learned documentation, the use of information technology, and coaching processes by mentor teams and partner networks. This approach will help all involved parties to learn and develop together.

### **Strengths:**

- 1. The schools have conducted a comprehensive study of diverse foundational data to connect it with educational management.**
- 2. The diverse foundational data has helped the institution clearly understand its context, strengths, and identity, enabling a more systematic and clear connection to its vision, student characteristics, and competencies.**
- 3. The curriculum clearly emphasizes competencies. While there are still challenges in connecting these with other components, improvements can be made in the future.**
- 4. The curriculum offers a more diverse range of learning content, including subjects, projects, programs, modules, and activities. It is now clearer than before that the specified learning content is appropriate for the varying contexts of different schools, with more attention given to context.**
- 5. The teaching - learning content has become more systematic, with clearly defined subjects, course descriptions, course structures, and learning units that are interconnected. Although not yet perfect and continuously aligned, it is a good starting point that can be further developed.**
- 6. The scheduling of learning time has become more flexible, allowing the institution to allocate time for student development that better aligns with its context and priorities.**
- 7. The design of learning management increasingly incorporates active learning. Teachers are demonstrating creativity in designing engaging learning activities and are aware of the importance of achieving student competencies. However, there is still a need for a deeper understanding of the process of designing learning experiences to ensure students achieve these competencies.**
- 8. The institution uses the PLC (Professional Learning Community) process to support teamwork and collaborative learning, leading to more effective and advanced teaching and learning.**

### **Weaknesses:**

- 1. The schools still have unclear and ambiguous understanding of key concepts used in the curriculum, such as philosophy, principles, main concepts of the school, vision, mission, and student characteristics. This results in repetitive and unclear writing or detailing of these terms.**

2. The alignment and coherence between various curriculum components, from start to finish, are still lacking. If the school has a particular priority, it should be reflected in the vision, student characteristics, competencies, learning content organization, course structure, course descriptions, learning unit/lesson plans, assessment and evaluation methods, and finally in the students themselves. This can be improved for clearer implementation aligned with the desired goals.

3. The course descriptions do not yet reflect a connection to the context/ School concept/ priorities of the institution and student characteristics. Research should be conducted to develop the most appropriate course description format, leading to genuine student competency development.

4. In creating learning units/lesson plans, teachers have shown creativity in designing engaging active learning experiences. However, the connection and reflection on other components such as principles, priority areas, context, competencies, and student characteristics tend to fade before reaching the students. This is a complex and detailed task that requires:

- Practice and development until mastery.
- The development of innovations to guide thinking and design, ensuring that no components are overlooked.

5. Most assessment and evaluation rely on centralized guidelines and principles. However, the methods and tools developed by the school itself, which should be aligned with students and context, are minimal. This should be more clearly specified in the process.

6. Most school curricula lack comprehensive information on competency-based curriculum management. This needs to be addressed in the future, with plans for more complete and clear operations, linked to educational quality assessment and the development of innovations in educational management.

#### **Summary:**

The overall opinions and suggestions regarding the competency-based school curriculum provide information that schools can use to review their curriculum and make necessary adjustments. Additionally, this information can be used by the Educational Innovation Area Steering Committee to provide academic support to schools, helping to improve the quality of the competency-based school curriculum.

#### **Successful Factors**

- **School heads/Principal as Academic Leaders:** School heads emphasize their role as academic leaders (Academic Leader/Instructional Leader/Learning Leader).
- **Learning and Collective Teamwork:** All involved parties engage in continuous learning and collaborative teamwork
- **Mentors/Coaches:** Adequate academic support (Technical Support) is provided by coaches, educational supervisors, academics, knowledgeable individuals, and experts.
- **Teacher Support System:** A continuous support system is in place to enhance teachers' knowledge and understanding, driving changes in instructional practices to develop student competencies for professional development.
- **Continuous Management System:** There is a systematic and ongoing management process in place

## **Key Components of a Competency-Based School Curriculum (34 Criteria)**

### **Area 1: Concepts, Basic Information, and the Process of Developing a Competency-Based School Curriculum**

1.1 Information regarding the background, concepts, principles, and reasons for developing a competency-based school curriculum is clear, demonstrating the vision and ideas of the administrators, motivations, key factors influencing change, and the school's resources.

1.2 General information about the school is comprehensive and helps to understand the school's actual conditions.

1.3 Information about various levels of context—school, community, local, regional, national, and global—is provided, is significant, and is linked to the school's educational management, sufficient for curriculum development.

1.4 The process of developing the school curriculum reflects the participation, commitment, and creativity of all involved personnel.

### **Area 2: School Goals and Mission**

2.1 The philosophy or principles or concepts adopted by the school have clear origins, explanations, and justifications.

2.2 The school has a core concept (School concept), identity, or uniqueness that highlights an educational priority suitable to its context.

2.3 The vision outlined clearly reflects the desired future of the school, is realistically achievable, aligns with the school's philosophy/principles/main priorities/identity/context, and is consistent with the objectives of the Educational Innovation Area.

2.4 The school has set a mission that provides concrete guidelines or methods for achieving the set vision, encompassing student development, personnel development, management, resource mobilization, and collaboration.

### **Area 3: Competency-Based School Curriculum Framework**

3.1 The curriculum's objectives outline competencies and characteristics/values aimed at developing students in alignment with the school's priorities and vision, addressing the needs of students/community/locality/society.

3.2 The characteristics of students reflect clear, tangible, desirable attributes that are achievable and assessable, linked to the competencies set by the school.

3.3 The core competencies, competency descriptions, competency levels, and behavioral indicators defined/referenced by the curriculum cover the requirements of the draft Basic Education Curriculum Framework B.E. .... of the Office of the Basic Education Commission (OBEC). Additional competencies, if any, should be relevant and meet the specific needs or context of the school.

3.4 The learning content defined/referenced in the curriculum should meet the requirements of the draft Basic Education Curriculum Framework B.E. .... of OBEC. Any additional content should address specific needs/context of the school and be appropriate to the students' developmental stages.

3.5 The learning outcomes at the end of each educational level, defined/referenced in the curriculum, reflect both core and specific competencies, cover the requirements of the draft Basic Education Curriculum Framework of OBEC, and any additional outcomes should meet the specific needs/context of the school and be developmentally appropriate for the students.

3.6 The annual learning outcomes expand on the requirements of the draft Basic Education Curriculum Framework B.E. .... of OBEC, ensuring continuity across grade levels, aligning with both core and specific competencies, and meeting the desired student outcomes in line with the school's philosophy, direction, and context.

3.7 The organization of learning areas in various formats, such as by subject/course, project, module, or activity, covers the content and learning outcomes defined by the school curriculum and is appropriate for students' developmental stages and specific needs.

3.8 The curriculum's time structure and weekly schedule align with the overall time structure and proportions for each learning area specified in the draft Basic Education Curriculum Framework B.E. .... of OBEC. Adjustments or additions may be made to emphasize the desired student competencies without adding unnecessary burdens on students or teachers, avoiding competitive testing.

3.9 The description of learning areas includes objectives, methods, learning processes, and expected outcomes, as well as assessment and evaluation methods, reflecting the integration of knowledge, skills, and attitudes and their application in various situations, clearly linked to achieving specific and core competencies.



## **Area 4: Competency-Based Learning Approaches**

### 4.1 Learning Management

4.1.1 The learning management approaches specified by the school align with the principles of competency-based learning, focusing on developing the ability to apply knowledge, skills, and attitudes holistically in work, problem-solving, and appropriate living according to context.

4.1.2 The school incorporates interdisciplinary integration, active learning management, and a variety of learning methods that help students achieve both specific and core competencies.

4.1.3 There are approaches to encourage students to self-direct, manage their learning, and reflect for self-improvement toward expertise according to their interests/aptitudes.

4.1.4 There are approaches to formative assessment, covering both self-assessment by students and feedback from teachers, integrated with the teaching-learning process.

### 4.2 Learning Innovation

4.2.1 The learning innovations chosen by the school are appropriate for developing the desired competencies and addressing the problems, needs, priority areas, and context of the school.

## **Area 5: Competency-Based Learning Assessment and Evaluation**

5.1 The methods for assessing and evaluating competencies cover both formative and summative assessments. There are tools designed for assessment at the lesson plan level, consistent with the students' learning processes over time. Systematic recording, processing, and reporting methods are in place for parents, the next grade's teachers, and internal school quality assessments.

5.2 The criteria for graduation at each level offered by the school are specified, possibly based on the Educational Innovation Area Policy Committee's guidelines or supplemented according to the school's philosophy and direction.

5.3 The methods for reporting learning outcomes, including processing methods and the design of learning reports, are specified for parents, overseeing agencies, next grade's teachers, and as part of the school's internal quality assessment documentation.

## **Area 6: Competency-Based Curriculum Management**

6.1 The classroom organization, learning environment, instructional methods, and use of learning resources, both within and outside the school, are consistent with the curriculum content.

6.2 The school has a clear plan for developing administrators, teachers, and educational personnel, aligning with curriculum development. This includes job-embedded professional development, such as a clear PLC (Professional Learning Community) system, and specialized training, focusing on developing competencies for administrators and teachers to lead academic change effectively in the classroom.

6.3 The school has a clear plan for establishing collaborative networks with stakeholders, such as communication with parents, joint learning activities with the community (People mapping/Community mapping), or with other organizations, and holding meetings with the school's board on understanding and learning together.

6.4 The school has a systematic plan for internal quality assurance, referencing the Educational Innovation Area Policy Committee's guidelines on internal quality assurance for pilot schools.

6.5 If the school adopts educational management innovations, they must align with the school's objectives and context, with detailed information, resources, and expertise supporting the feasibility of achieving successful outcomes.

## **Area 7: Classroom Curriculum**

7.1 There is at least one example of a course/subject structure that shows the learning roadmap from the beginning to the end, organizing and integrating content into related units, with appropriate time allocation, leading students to key concepts and achieving both core and specific competencies within the curriculum's timeframe.

7.2 There are at least two comprehensive lesson plans, including objectives/learning outcomes, concepts, and content, learning management processes, and assessment methods, all aligned within and across components.

7.3 The school provides learning situations, experiences, tasks, and activities consistent with competency-based learning principles and the approaches defined by the school, leading students to the desired objectives.

7.4 The learning innovations chosen by the school clearly reflect the competency-based outcomes for students.

## **Topic 2: New Educational Formats, Competency-Based Curriculum Alternative Education**

*Chotima Nooprick, Ph.D  
Office of the Basic Education Commission (OBEC)  
Ministry of Education in Thailand*

The National Strategy 2018 - 2037 is the national framework and direction of development. An importance of putting the policies into practice is developing an appropriate curriculum should consist with current contexts, solve problems and meet social needs. The curriculum based on the National Strategy 2018-2037 emphasis on integrated knowledge. Designing to help students prepare their life in the real world. Focus on lifelong education. Learn to construct knowledge. The students improve their skills and positive attitudes, have a confidence and self-respect. Be flexible and aware of the environment and be able to use knowledge creatively.

"Today we'll be talking about educational on the goals for 2030. we are going to delve into the future of education and what it holds for our students. As we look ahead, it's essential to understand that the world is changing rapidly. The skills, knowledge, attitudes, and values that were sufficient in the past may not be enough for the future. In this session, we will discuss the critical competencies that students need to develop to not only survive but thrive in the society of tomorrow. We'll start by exploring the key drivers behind these educational goals and why they are essential for shaping a better world. This session is crucial for educators, policymakers, and anyone involved in the future of education, as we will cover the strategies that will empower our students to become active, engaged citizens capable of shaping the world around them. Digital transformation, behaviour of the world population, the emergence of disruption patterns, international trade wars, and the pandemic of the COVID-19 virus caused unpredictable events. These situations are called "VUCA World".

In order to combat the VUCA World, Thai children must be supported to learn what they are good at and interested in. Moreover, they have to fulfil essential knowledge and analytical and creative thinking skills that is necessary for the future world, teachers play important roles as mentors and supporters to build children's capacity through STEAM, STI and coding education. So children are able to apply knowledge and skills to solve problems in real life, to be ready for higher education and their future career. This is in line with the skill development guidelines in the 21st century that everyone has to learn for life.

The Thai Education system consists of 12-year free basic education: 6 years of "Prathom" (primary education, P1 to P6) and 6 years of "Mattayom" (secondary education, M1 to M6). Enrolment in the basic education system begins at the age of 6. The current Thai

Education system stems from the reforms set by the 1999 National Education Act which implemented new organisational structures, promoted the decentralization of administration and called for innovative learner-centred teaching practices. The Thai education system (Figure 1) provides 9 years of compulsory education, with 12 years of free basic education indicate in the Constitution.

The pilot study curriculum in the Education Sandbox is based on the concept of competency-based curriculum. The six core competencies include self-management, higher order thinking, communication, teamwork and collaboration, active citizenship and sustainable coexistence with nature and science. Self-management is about helping students take control of their learning and behaviour. It's an essential skill for success in both education and life. Higher-order thinking encompasses critical thinking, problem-solving, and the ability to analyse and synthesize information. Communication refers to using appropriate language in communication in various situations. Teamwork and collaboration prepare students to work effectively with others in increasingly interconnected and globalized work environments. Active citizenship is another key competency, which involves not only understanding one's rights and responsibilities but also actively participating in the community and society. Lastly, sustainable coexistence with nature and science reflects the growing importance of environmental stewardship and scientific literacy. As the world faces challenges like climate change and resource depletion, it's vital that students understand how their actions impact the world around them.

The vision of The Basic Education Core Curriculum is aimed at enhancing capacity of all learners, who constitute the major force of the country, so as to attain a balanced development in all respects physical strength, knowledge and morality. They will fully realize their commitment and responsibilities as Thai citizens and members of the world community. Adhering to a democratic form of government under a constitutional monarchy, they will be endowed with basic knowledge and essential skills and favourable attitude towards further education, livelihood and lifelong learning. The learner-centred approach is therefore strongly advocated, based on the conviction that all are capable of learning and developing themselves to their highest potentiality with the following goals

1. Morality, ethics, desired values, self-esteem, self-discipline, observance of Buddhist teachings or those of one's faith, and applying principles of Sufficiency Economy Philosophy.
2. Knowledge and skills for communication, thinking, problem-solving, technological know-how, and life skills.
3. Good physical and mental health, hygiene, and preference for physical exercise;

4. Patriotism, awareness of responsibilities and commitment as Thai citizens and members of the world community, and adherence to a democratic way of life and form of government under a constitutional monarchy; and

5. Awareness of the need to preserve all aspects of Thai culture and Thai wisdom, protection and conservation of the environment, and public-mindedness with dedication to public service for peaceful and harmonious coexistence.

Which is to encourage students to develop key competencies which are (1) Communication Capacity (2) Thinking Capacity (3) Problem-Solving Capacity (4) Capacity for Applying Life Skills (5) Capacity for Technological Application and want to create students with good characteristics for themselves and others by instilling in students love for the nation, religion, and the monarchy. Be honest Have self-discipline Be enthusiastic about learning Know how to apply the Sufficiency Economy Philosophy to your life. Have determination and dedication to work Adhere to Thai nationalism and is a public-minded person

There are learning standards and indicators for all eight learning areas, consisting of: (1) Thai Language (2) Mathematics (3) Science (4) Social Studies, Religion and Culture (5) Health and Physical Education (6) Art (7) Occupations and Technology (8) Foreign Languages and there are Learner Development Activities including: (1) Counselling activities (2) Student activities (3) Activities for social and public interest

The challenges Thailand faces are characterized by the VUCA framework: volatility, uncertainty, complexity, and ambiguity. These challenges are compounded by poor performance in international assessments, high youth unemployment, and significant dropout rates before Grade 9. A noteworthy aspect is the aging population, which presents both challenges and opportunities for educational needs and workforce dynamics.

To address these, Thailand's educational reform is anchored in several pillars: Personalization, Security, Competency, Prosperity, Sustainability, and Thailand 4.0. Each pillar serves as a strategic direction towards creating a more inclusive, sustainable, and forward-looking educational environment.

Personalization aims to cater to individual needs and promote lifelong learning. This includes adapting curricula to better fit individual career paths and enhancing the quality of life through education.

Security in education emphasizes well-being and health, ensuring that the educational environment contributes positively to the life satisfaction and happiness of its participants.

Competency, focuses on building observable skills and competencies that are relevant in the real world, moving away from traditional rote learning to more practical applications.

Prosperity focuses on economic growth and the development of smart citizens who can contribute effectively to the economy.

Sustainability looks at the bigger picture of environmental and community health, promoting practices within the educational system that support sustainable development.

Finally, Thailand 4.0 is the vision driving the country towards innovation, with an emphasis on technology integration, digital learning platforms, and non-formal education that aligns with current and future job markets.

Educational strategies include enhancing teacher performance, leveraging digital platforms for self-directed learning, and ensuring quality assurance across educational and employment sectors. The administration of these initiatives involves decentralization and capacity building, ensuring that changes are consistent and effectively implemented at all levels.

These pillars and strategies are interlinked to create an ecosystem where education is not only about academic success but also about building a resilient, competent, and happy society.

In the curriculum development, it is necessary to analyse and synthesize documents from various sources as follows:

- Royal Guidance on Education
- The 20- year National Strategic Plan & 12th National Economic and Social Development Plan
- National Education Plan-National Educational Standards A.D. 2018
- 21st Century Skills
- The Future of Education and Skills Education 2030 (OECD)
- Four Pillars of Education (UNESCO)
- Sustainable Development Goals
- Research papers on curriculum implementation

The draft version of Basic Education Curriculum Framework aims to develop all learners' core competencies so that they can reach their full potential. There are 11 essential components: (1) Fundamentals of curriculum development; (2) Vision; (3) Curriculum principles; (4) Curriculum Objectives; (5) Desirable characteristics; (6) Six core competencies and 10 competency levels; (7) Learning areas; (8) Relationship between core competencies with the content of 7 learning areas (in the 1st grade level); (9) the structure of the study time; (10) the learning management approach and assessment; and (11) curriculum management guidelines. The six core competencies are (1) self-management; (2) higher-order thinking; (3)

communication; (4) teamwork and collaboration; (5) active citizenship; and (6) sustainable coexistence with nature and science. Level 1 learning areas include Thai language, mathematics, English language, arts, health and physical education, social studies, and science and natural systems. This draft curriculum framework leads to various educational approaches. Due to the practitioner relevance, the components of learning and assessment were expanded into elements, and the major components of (1) Fundamentals of curriculum development; (2) Vision; (3) Curriculum principles; (4) Curriculum Objectives; and (5) Desirable characteristics were collapsed and reported as prologue in the quantitative part of this research.

These include the revolutions of Industry 4.0 and Thailand 4.0, 2030 Agenda for the United Nations Sustainable Development Goal 4 (SDG 4) in Quality Education, ASEAN Economic Community (AEC) preparations, workforce's need, middle income gap, population aging, deterioration of natural resources due to unsustainable economic growth, and educational quality and management system development. Among these issues, the primary challenges are a middle-income trap, an inequality trap, and an imbalanced trap. However, the 21st century's intellectually intensive on jobs opportunity has changed by the industrial revolution. Education 4.0 is promoted to stimulate learners to be creative and innovative. The life skills or the innovative skills to live in the era of Education 4.0, besides possessing 21st century skills, consist of leadership, collaboration, creative, digital literacy, effective communication, emotional intelligence, entrepreneurship, global citizen, problem-solving and teamwork. It also has to include the skills of building an intelligent nation or intelligent people who are with critical thinking, creativity, innovation, cross-cultural understanding, information and media literacy, career and learning skills.