Creative Economy Learning Management to Promote Sustainable Citizenship for Secondary School Students in the Upper Northern Special Economic Development Zones, Thailand

Charin Mangkhang¹, Nitikorn Kaewpanya¹, Teerawat Cheunduang¹, Kasamas Muangkaew¹ & Monton Onwanna¹

¹ Faculty of Education, Chiang Mai University, Thailand

Correspondence: Charin Mangkhang, Faculty of Education, Chiang Mai University, 239 Huay Kaew Rd, Suthep, Mueang District, Chiang Mai, 50200, Thailand. E-mail: charin.mangkhang@cmu.ac.th

Received: November 11, 2023 Accepted: February 20, 2024 Online Published: February 24, 2024

Abstract

The objectives of this research were 1) to study creative economy learning approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand, and 2) to design guidelines for creative economy learning management to promote sustainable citizenship. for secondary school students in the Upper Northern Special Economic Development Zones, Thailand, and 3) to study the results of using creative economy learning management approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand. The research was action research. Samples in this research included 1) a group of 15 people who provided information on creative economy learning with the selection based on purposive sampling, 2) a group of 7 people who evaluate learning innovations with selection based on purposive sampling and 3) learning innovation trial group including 299 secondary school students with selection based on simple random sampling, coming up with a total of 321 students. The research tools included 1) a semi-unstructured interview form, 2) a form to evaluate the effectiveness of learning management approaches, and 3) a sustainable citizenship assessment form. The research results revealed that.

- 1. The study on creative economy learning approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand revealed that creative economy learning management is an integration of creative economy concepts and a basis for learning for students to focus on skills, knowledge and understanding of the economic system with a production system of products and services that rely on the existing experiences and knowledge base. This can be done by making use of cultural resources, including economy, traditions, ways of life, and ways of living, combined with knowledge. creativity and technology level to lead to the appropriate upgrading of one's own economic system. The creative economy learning management to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand will require promotion to bring about learning competency in 4 areas, consisting of 1) Competency regarding Community Engaged Learning 2) Economic Literacy Competency 3) Competency regarding Environmental Awareness and Green Citizenship and 4) Competency regarding Creative Economy Innovation Development.
- 2. Designing creative economy learning guidelines to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand, it was found that the researcher had designed a learning plan that integrated creative economy learning methods. It is designed as a lesson plan for the creative economy by using the area-based learning cycle teaching strategy (AAAR Teaching Approach) of Mangkhang (2023) together with creative community economics learning activities for 12 class periods, with evaluation results for the overall quality at the most appropriate level.
- 3. The study on the results of using creative economics learning management approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand revealed that the level of students' sustainable citizenship in an overall picture was at the highest level.

Keywords: creative economy learning management, sustainable citizenship, special economic development

zones, social studies, Vlog media

1. Introduction

Under the challenges of national development that must be faced in the next period in terms of transitioning to the digital age, international cooperation in reducing greenhouse gases, changing the population structure into an aging society, international conflicts, risks to food and energy security, emerging diseases and epidemics amidst such a highly uncertain situation, the 13th Development Plan has set the development direction based on four important principles, namely the Sufficiency Economy Philosophy, Resilience Concepts, United Nations Sustainable Development Goals (SDGs), and the BCG (Bio-Circular-Green Economy) economic model to reach the main objectives of the development plan. This is to "transform" Thailand into a "progressive society with the economy creating sustainable values" (National Strategy 2018-2027).

Regarding the concept of Goal 4 for Sustainable Development (SDGs), the concept of Area Based Education and the philosophy of Sufficiency Economy aim to create an equitable and inclusive education system. They promote lifelong learning of citizens of the world to reach international principles for quality higher education and develop learning skills that can be incorporated into their local communities. This relies on the environment as an important lesson in integrating learning in other fields of study. One of the approaches is to collect community experiences that arise from the analysis of the master curriculum to be used in designing local curriculum or a learning method that uses social phenomena as a basis to complement the national core curriculum and provide learning experiences in which localities and communities participate in every dimension and use them as a guideline for organizing teaching and learning to be consistent with the conditions and needs of area-based communities and imaginary communities that creates meaningful learning processes and reinforce desired citizenship for all learners (United Nation, 2015; Kaewpanya, Mangkhang, & Dibyamandala, 2021; Mangkhang, Yimsawat, Nettip, & Kaewpanya, 2021) Sustainable development is development that focuses on creating balance in 3 dimensions: economy, society, and environment by developing every dimension. They are all interrelated and related to the three dimensions of sustainable development, namely (1) sustainable economic development (Sustainable Economic Development), (2) sustainable social development (Sustainable Social Development) and (3) development. Sustainable environmental development (Laoha, 2018) is a response to the rapidly changing circumstances of the global society (Disruption Society), which has a direct impact on the way of life of people in the present era broadly and it is very necessary to have guidelines for changing social behavior in various forms, such as education, occupations, communication, etc, according to the trend of changing occurring continuously.

Social disruption is a phenomenon in which humans try to adapt to a society that has undergone drastic changes with traditional beliefs that are deteriorating. Society is facing a new phenomenon arising from migration natural disasters, the environment, technology, population reduction, economy, politics, and epidemics which are situations in which humans have changed their way of living in the future (Beck, 2017). The condition of society has changed (The Transformational Society). Society has changed the basic paradigm, which will be a challenge during the call for society to preserve but at the same time value new technology (Bezold, 2009). This phenomenon is what causes the education system to be revisited and prepare students for the possibilities in various dimensions that will occur to global citizens, whether they are climatic changes, epidemic situations, artificial intelligence that replaces human resources in the production system, or the interactions of people that have changed. All of these things will have an impact on people's lifestyles that will completely change in the future (Mangkhang & Kaewpanya, 2021). The world is moving towards a world without borders. There is no boundary in accessing information and communication with convenience and speed. Modern technology media plays a role in the lives of people of all ages, especially teenagers. There is a rapid spread of various media and information technologies. Messages are sent and received through the use of various communication devices such as TVs, phones, tablets, computers, etc. (National Statistical Office, 2018) The use of digital technology is part of larger human behaviors influenced by the belief system and value orientations that society at large has established. From the results of the survey on the use of technology for education by the Basic Education Commission, it was found that technology is something that will help increase educational opportunities conveniently, quickly, timely, and thoroughly in learners of all genders, all ages, and all educational systems for formal education, non-formal and informal education. If technology is used correctly and the benefits are known. The use of technology can be used as a tool for organizing effective teaching and learning and creating equality in receiving various news, convenient, fast, and keeping up with the world situation regularly with no limit in learning. (Ministry of Education, 2015). Educational management must be adapted to develop citizens with knowledge and knowledge to keep up with changes in society and to be able to live a balanced life

From reviewing the vision of the 2008 Basic Education Core Curriculum, has focused on developing all learners,

who are the strength of the nation to be human being who is balanced in terms of body, knowledge, morality, and awareness of being a Thai citizen and a citizen of the world. They are also developed to adhere to democratic governance with the King as Head of the State, have the basic knowledge and skills, and attitudes necessary for further study, careers, and lifelong education with a focus on learners, based on the belief that everyone can learn and develop themselves according to their potential. (Ministry of Education, 2008). For the aspect of creating opportunities and equality according to the 20-year national strategy of 2018-2037, there are important development goals that place importance on drawing on the power of various sectors, including the private sector, civil society, and local communities to join in driving by supporting the gathering of people to think together and act for the common interest (Office of the National Economic and Social Development Board, 2018). In educational management, we, therefore, must focus on integrating area-based identity in the community as a basis for learning management whereby there are various learning dimensions such as community economics, community culture, community economy, etc. This knowledge wholly exists in students' areas, and it is very beneficial to use it to manage learning for students to create a learning process for sustainable citizenship of the locality.

According to the announcement of the Special Economic Development Zone Policy Committee No. 2/2015 regarding determining the area of the Special Economic Development Zones, Phase 2, the areas of Chiang Khong District, Chiang Saen District, and Mae Sai District, Chiang Rai Province have been designated as "Chiang Rai Special Economic Development Zones" resulting in the development of guidelines for developing the area of Chiang Rai province to be ready for economic development in various dimensions. The establishment of a special economic zone is considered an important area-based development and is specific according to the law for the benefit of promoting, supporting, and facilitating, including granting certain privileges in operating various businesses such as industry, commerce, services, or any other activities that are beneficial to the national economy (Sukkasem, 2014). As a result, Chiang Rai province must prepare for sustainable citizenship in the province with knowledge, and understanding of the development of the Chiang Rai Special Economic Development Zone so that people will become aware of the important role in driving such policy together with the government and private agencies to coordinate the power to develop the economy of Chiang Rai Province to progress.

The important goals of the social studies learning group are to help learners have knowledge and understanding of human life both as individuals and living together in society, adapt to the environment, manage limited available resources, understand the development and changes according to age, time according to various factors, gain an understanding of oneself and others, be patient, tolerant, accept differences, and have morality. They can apply knowledge in life and be a good citizen of the nation and world society (Ministry of Education, 2008). Effective social studies learning should promote learning and basic concepts by using the educational methods of social sciences in dealing with various issues and problems, reflective thinking, social critique, and practice and they can develop oneself as a member of society to be a good citizen valuable to society and able to live happily with others (Michaelis & Garcia, 1996). In addition, this must rely on the concept of area-based learning, which is an educational management that is based primarily on local problems and needs to achieve sustainable development in local communities The focus is on the participation of individuals involved in education and local communities. Learning management must be adjusted to respond to the ways of each community in each area related to fragile problems and crises that are occurring in the community and place importance on finding solutions for managing society as a process for students. This will affect the students' strong citizenship, and the connection of students with their own communities, resulting in "community innovation" for maintaining community ways in the future. This must arise from the characteristics within students who want to play a role as a member of society in looking after and maintaining their own local society.

From reviewing the concept of learning for changes which is education for profound changes to enable students to become aware of their own inner world consisting of thoughts, feelings, beliefs, attitudes, views of the world, and life, including behaviors in daily life at each moment, this awareness will enable students to progress towards developing themselves into complete people and continue to create good interactions with the conditions of life and the surrounding environment in a mutually supportive manner. The goal of learning for changes is changing the framework of beliefs, perception hypothesis, thought, intention, expectations which influence how we perceive and give meaning to experiences until it leads to sustainable citizenship that aims to participate in the situation of society and expands the scope of awareness of sustainable citizenship in 3 dimensions, namely 1) expanding the scope of time awareness by concerning about equality and equality in various dimensions in the past, present and future impacts 2) expanding the scope of area-based awareness by having responsibility on a global level, not just in one's own country; and 3) expanding the scope of ethical awareness by focusing on

responsibilities for nature, society, the environment, humanity and all living things (Mezirow, 2003; Thana Nilchaikowit, et al., 2009; Jaufar, 2021). This is an educational concept that focuses on creating a learning process that creates changes from the thinking structure and consciousness of students and is translated into behavior that aims to thoroughly seek knowledge around us with various perspectives such as the economy in the community, local culture, beliefs, traditions, etc., which are all general knowledge surrounding students and can be raised as issues for learning.

From teaching in the economy subject, it was found that students had little knowledge, and understanding about the identity of their community and were unable to connect classroom content with phenomena in their community, such as traditions and beliefs in the community, community health system, local economy, community economy, etc., especially for the community economy which is an important part of driving the community. It is the cornerstone of wealth in the community and plays an important role in learning and career opportunities for students in the community whereby the students thought that it was a distant matter and had little to do with themselves. In addition, students were unable to concretely identify their own roles in participating in the development of their communities. This is caused by a lack of connection between the classroom and the community, making students unable to use the knowledge they receive and bring it back to their daily lives in the community.

A community economy is a local economic system. or a community that has a holistic nature. It does not only include the economic dimensions of incomes, expenditures, production, and consumption but it will also be an economy that is part of society and culture and is related to the way of life of people in the community, including having a value system as well (Sriwichailamphan, 2013). The economic system that can be seen in the community has characteristics that relate to people, the environment, and resources that appear in the local area. Each community economy has its own identity and affects the way of life and economic activities in various dimensions. Creative learning management through the dimensions of community economy will help students understand their local identity and be able to apply knowledge in the classroom to daily life, helps raise awareness of the role and duty of the new generation of citizens in caring for natural resources and local wisdom, which is an important source of national treasures. This can be done with creative learning that will help build the learning process and a good perspective on the development of the grassroots economic system to strengthen the local community (Mangkhang, Yimsawat & Kaewpanya, 2021), which will require learning management that creates creative thinking processes together with the use of various technologies. This will make students interested in learning, and have the freedom to design community innovations to develop their community's economy creatively.

Creative learning organizes the learning process according to the concept of creative education. Content and activities must be arranged according to the interests and aptitudes of the learners, taking into account individual differences. Students are allowed to learn from real experiences, and practice to be able to do, think, do, and pursue continuous learning throughout their lives (Munkham & Munkham, 2004). In addition, creative learning is a learning process that aims to encourage recipients of organizing the learning process to use creativity to produce works in a form according to the imagination of each person. Learning innovations are developed because of the cooperation of communities, parents, agencies, and local organizations (Edward De Bono, 1982; Nilphan & Wattanaworachai, 2015). They have been transferred to various learning products such as Vlog media, electronic travel books, community tourism websites, etc. These innovations will play an important role in developing the community's grassroots economic system and help cultivate sustainable citizenship for students to be aware of their roles and responsibilities in the development of local communities.

Creative learning through the community economy will help promote sustainable citizenship so that people will become citizens with awareness, understanding, love, and connection to the community. Therefore, it is important for the success of decentralization to local areas (Horne, et al, 2016) aiming to create an environment-friendly economy, develop learning through cultural capital and local wisdom, and make society peaceful. The community is self-reliant and people learn to live in sufficiency This is in line with the vision of a stable, prosperous, and sustainable Thailand, a developed country with development following the Sufficiency Economy Philosophy. In terms of sustainability and the United Nations Sustainable Development Goals (Sustainable Development Gold: SDGs), natural resources are more abundant, and the environment is of better quality.

Sustainable citizenship includes responsibilities for economic, environmental, and equitable development that are to be practiced daily. Sustainable citizenship is the role that citizens can play to help improve social justice, safeguard nature, or any action that contributes to sustainable development and that makes the world a better place to live. (Micheletti & Stolle, 2012; Micheletti, Stolle, & Berlin, 2014) Sustainable citizenship It is a new

standard for citizen development in the next century that must prepare citizens with knowledge and knowledge of the environmental situation and various changes in the world. To participate in managing society's problems and join in being a force in driving public policy that aims to create balance for the environment.

Therefore, the researcher saw the importance of studying creative economy learning management to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand to study creative economy learning approaches to promote sustainable citizenship. Then, it was used to design creative economics learning guidelines to promote sustainable citizenship, and conduct a trial for use before evaluating the sustainable citizenship of secondary school students in the Upper Northern Special Economic Development Zones, Thailand. Things that were focused on were cooperation between teachers, educational institutions, and communities for learning management that responded to area-based education, with ideal science regarding the needs of students being placed importance on, leading to the design of learning management that was consistent with area-based identity, emphasizing community-based economic development in the upper northern region of Thailand.

2. Method

Step 1 The research model

The research was conducted in the form of Community-Based Action Research (CBAR) by collecting and analyzing data obtained from semi-structured interview forms, quality assessment forms of learning management approaches, and sustainable citizenship assessment forms. Study results were presented in the form of descriptive analysis using quantitative data and qualitative data to support the data synthesis and the description.

Step 2 Populations and samples

The population consists of 3 groups: 1) those who provide information on learning about creative economy whereby they are experts in teaching social studies, consisting of staff of teachers and social studies teachers; 2) a learning innovation evaluation group consisting of staff of educational supervisors and teachers who are experts in social studies learning management. 3) a learning innovation trial group consisting of secondary school students.

The research samples consists of 3 groups: 1) a group of 15 people who provided information on creative economy learning, selected by purposive sampling; 2) a group of 7 people who evaluated learning innovations, selected by purposive sampling; and 3) a learning innovation trial group including 299 secondary school students, coming up with a total of 321 people, based on simple random sampling.

Step 3 Tools used in research

Tools used to gather data include:

- 1) Semi-structured interview forms
- 2) Quality assessment forms of learning management approaches
- 3) Sustainable citizenship assessment forms

Step 4 Data collection

- 1) A Documentary Study was conducted by collecting information on creative economy learning management from documents, books, journals, and other secondary sources appearing in the database to collect basic information on creative economy learning management and the obtained data were used to further analyze educational issues.
- 2) Situational Analysis is a collection of data about creative economy learning management by interviewing the sample group in the research including staff of teachers and social studies teachers who are experts in managing social studies schooling. The tools used are semi-structured interview forms on guidelines for creative economy learning management to promote sustainable citizenship.
- 3) Design and Development is the design and development of guidelines for creative economy learning management to promote sustainable citizenship and conducting efficiency evaluation by learning management experts to use the evaluation results and recommendations to develop creative economy learning guidelines. The tools used were quality assessment forms of creative economy learning management.
- 4) A study of the results of using the creative economy learning management approach to review the knowledge and the competencies that emerge among students through the analysis of the student sustainable citizenship assessment form. Then, the results of the analysis were included in the discussion of the research results whereby the tools used were the sustainable citizenship assessment form.

Step 5 Data analysis

- 1) The content analysis has defined 4 steps for content analysis: 1) Set up rules for content analysis; 2) Lay out the data by making a list or text that will be analyzed and then divide it into categories; 3) Take into account the context or the environment in which the document data is analyzed; and 4) Analyze the data by analyzing the content as it appears in the document and make interpretations to summarize the data. The research results were presented in a descriptive form.
- 2) Quantitative data analysis was conducted by analyzing the data obtained from the assessment form with a statistical package. The analysis was based on descriptive statistics by showing the results of statistical analysis as the average and standard deviation.

3. Results

For the research at this time, the research team has classified the data obtained from the study and presented the research results according to the determined objectives. The study results can be summarized as follows:

- 1. The study of creative economics learning approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand, it was found that creative economy learning is a concept for promoting and developing the economic system that has not been further developed in classroom learning. The researcher has, therefore, summarized the knowledge of the concept of creative economy learning that creative economy learning is an integration of the concept of creative economy and is a learning base for students to focus on skills, knowledge, and understanding of the economic system with the system producing products and services that rely on the existing experience and knowledge base. This is done by taking advantage of cultural resources, including economics, traditions, ways of life, and ways of living, combined with knowledge, creativity, and technology levels to lead to the appropriate upgrading of one's own economic system. From the above information, the researcher has synthesized all the processes mentioned above and found that guidelines for creative economy learning management that will promote sustainable citizenship of secondary school students in the Upper Northern Special Economic Development Zones, Thailand must promote learning competencies in 4 areas, consisting of 1) Competencies in Community Engaged Learning,
- 2) Competency in Economic Literacy, 3) Competency in Environmental Awareness and Green Citizenship, and 4) Competency in creative economy innovation development for sustainable communities.
- 2. Designing guidelines for creative economics learning management to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand, it was found that the researcher had designed a learning plan that integrated creative economy learning methods. It is designed as a creative economics learning plan using the area-based learning cycle teaching strategy (AAAR Teaching Approach) of Mangkhang (2023) together with creative community economic learning activities, totaling 12 class periods, consisting of:

Table 1. Details of the creative economy lesson plan and action learning.

Lesson Plan 1: To "Selecting in to study" in activities for 1 period in study" in the study in t

Details of activities

The activity "Selecting communities students interested into study" involved gathering groups and meeting to select markers in studying community by choosing from communities that have interesting information and community economic systems. The distance from the school is not more than 60 kilometers. Each student was asked to propose one community. Then, each student was allowed to discuss the interests of the community they had chosen. Then, one community was selected by voting from the people in the group according to democratic principles. After that, students would write a report summarizing the information (Concept paper) to present to the subject teacher further.

Action Learning



(Photo: Meeting to set markers for communities to be studied with a distance from the school not exceeding 60 kilometers): The researcher has requested permission to publish the images.

Lesson Plan

Details of activities

Lesson plan 2: "Community field trip area-visiting planning" activities for 1 period

The activity "Planning for community fieldwork" is planning before going to community fieldwork areas. The students studied community study tools. Then, an action plan was designed to present to the subject teacher to receive feedback and techniques for visiting community study areas. After that, students were able to plan their operations and began to visit their community fieldwork areas.

Lesson plan 3: "Community field visits" activity for 5 periods The activity "Visiting community field trip areas" is visiting community field trip areas in the community selected by each group. The fieldwork used interviews, observation, questionnaires, or other methods as each group had planned. Images, videos, and audio were recorded to be further developed into Vlog media. In visiting community fieldwork areas, students considered relationships in the community. There were good interactions and students were always ready to learn the knowledge provided by the community.

Lesson plan 4:
"Development of creative community economy Vlog media" activities for 5 periods

The activity "Development of Creative Community Economy Vlog Media" is the development of Vlog media to present information on community field visits. This was conducted by presenting in the issue "Creative Economy" produced in the form of Vlog media and presented through an online platform along with the hashtag #สังคมศึกษาศึกษาสังคม(In Thai Language) to become a trend in online society and it is also a way to promote the local community to the public as well.

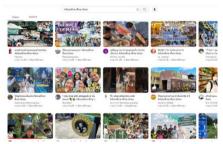
Action Learning



(Photo: Community field trip area-visiting planning meeting whereby the students brought their action plan to present to the subject teacher to receive recommendations before going to the actual area.): The researcher has requested permission to publish the images.



(Photo: Visiting community field trip areas to study information and economic systems in the community students were interested into study): The researcher has requested permission to publish the images.



(Photo: Vlog media that presents information and community economic systems that students were interested in which was presented in digital media format for distribution on various online platforms): The researcher has requested permission to publish the images.

Source: Mangkhang, et al (2024)

The researcher then took the designed creative economics lesson plan and checked it for content accuracy. By finding the Index of Conformity (IOC) from experts. Then, a lesson plan is developed, and the quality of the lesson plan is assessed by experts in social studies learning management. The evaluation results appear in the following table.

Table 2. Results of the quality assessment of the creative economics learning plan to promote sustainable citizenship. For high school students in the Upper Northern Special Economic Development Zone, Thailand. of experts (n=7)

No.	Assessment item	\bar{x}	SD	Interpretation
1	The lesson plan is consistent with the learning standards according to	4.67	0.58	Most appropriate
	the core education curriculum and the educational institution.			
2	The lesson plan promotes awareness of the importance of studying	4.33	0.58	Very appropriate
	economy with a multi-disciplinary perspective.			
3	The lesson plan covers the development of students to have knowledge,	5.00	0.00	Most appropriate
	skills, processes, important competencies, and desirable characteristics.			
4	The lesson plan promotes economic literacy and seeing the value of students'	4.00	1.00	Very appropriate
	economic education.			
5	The lesson plan provides an opportunity for the intellectual inquiry process	4.33	1.15	Very appropriate
	into economy through active learning.			
6	The lesson plan promotes strong citizenship (Active Citizen) of students.	5.00	0.00	Most appropriate
7	The lesson plan promotes pride in children and youth as sustainable citizens of the locality	4.33	0.58	Very appropriate
8	The learning management plans promote creative thinking.	3.67	1.15	Most appropriate
9	The lesson plan has content that is consistent with local economy learning resources.	5.00	0.00	Most appropriate
10	The lesson plan has a variety of learning medias and is beneficial to the study of economy.	5.00	0.00	Most appropriate
11	The lesson plan has local medias to be used in learning.	3.67	0.58	Most appropriate
12	The lesson plan has brought about new knowledge which can be used to	5.00	0.00	Most appropriate
	create innovation for the community.			
13	The lesson plan has creative presentation of knowledge and is beneficial	4.33	0.58	Most appropriate
	to the study of other community economies.			
14	The lesson plan promotes changes in range values, cognitive domain,	5.00	0.00	Most appropriate
	psychomotor domain, and affective domains.			
15	The learning management plans assess student progress in a variety of	4.33	0.58	Very appropriate
	ways appropriate to the nature of the subject.			*
Over	Overall picture		0.45	Most appropriate

Source: Mangkhang, et al (2024)

From Table 2, it is found that the results of the quality assessment of the creative economics learning plan to promote sustainable citizenship. For secondary school students in the Special Economic Development Zone of the Upper Northern Region, Thailand, according to the experts, the overall picture was at the most appropriate level ($\bar{x} = 4.51$, SD = 0.45). When considering each item, it was found that the lesson plan that was developed was the most appropriate among the 6 assessment items: 1) The lesson plan covers the development of students to have knowledge, skills, processes, important competencies, and desirable characteristics. 2) The lesson plan Promote sustainable citizenship of students. 3) The learning plan has content that is consistent with local economics learning resources. 4) The learning plan has a variety of learning media. and is beneficial to the study of economics. 5) The lesson plan creates new knowledge that can be used to create innovations for the community, and 6) The lesson plan promotes changes in range values, cognitive domain, psychomotor domain, and affective domains ($\bar{x} = 5.00$) and from the additional comments of experts it has been pointed out that the lesson plan has steps for organizing appropriate activities. And there are various learning platforms that are very responsive to teaching and learning in the current situation.

3. Study the results of using creative economics learning methods to promote sustainable citizenship. For secondary school students in the Upper Northern Special Economic Development Zone, Thailand, it was found that the researcher had used the creative economics lesson plan to organize teaching in the social studies subject and after the teaching was finished, had the students do the model. Assess sustainable citizenship The evaluation results appear in the following table.

Table 3. Standard deviation and the level of sustainable citizenship of students (n=299)

No.	Assessment item	\bar{x}	SD	Interpretation
1	Have knowledge and understanding of community economy and	4.58	0.59	Highest
	are interested in studying the economic system in their own locality			
2	Be aware of their roles in preserving and disseminating economy	4.41	0.84	High
	learning resources in their communities.			
3	Have the ability to think systematically and plan in fieldwork learning.	4.52	0.49	Highest
4	Have skills in using community study tools	4.58	0.97	Highest
5	Being able to interpret relationships between humans and the	4.35	0.68	High
	economic system in the community			
6	Have economic thinking skills	4.47	0.60	High
7	Have knowledge and understanding about values Identity	4.35	0.68	High
	and spatial context of economics studies in community areas			
8	Have knowledge and understanding about their role in	4.82	0.38	Highest
	driving the economic system in their local community.			
9	Take pride in being a sustainable citizen through the study of community economics.	4.76	0.42	Highest
10	Have creative ideas from digital media development	4.82	0.38	Highest
11	Develop skills in the process of learning about cultural differences.	4.35	0.58	High
12	Critical questions arise to lead to discussion and exchange of opinions together.	4.52	0.60	Highest
13	Critical thinking skills arise from studying the community	4.58	0.49	Highest
	context, analyzing and presenting data in various formats			
14	New knowledge is created that can be used to create innovations for the community.	4.58	0.49	Highest
15	Have a good attitude towards the local community study	4.52	0.84	Highest
Total average		4.55	0.60	Highest

Source: Mangkhang, et al (2024)

From Table 3, it was found that the overall level of strong citizenship among students was at the highest level (\bar{x} = 4.55, SD = 0.60). When considering each finding, it was found that students had the highest level of awareness of economy for a total of 10 items assessed as follows: Students 1) had knowledge and understanding of community economy and have an interest in studying the economic system in their own locality; 2) have the ability to think systematically and plan in fieldwork learning; 3) have the skills to use community study tools; 4) have knowledge and understanding about their roles in driving the economic system in their local community. 5) Have pride in being a sustainable citizen through studying community economy. 6) Have creative ideas from digital media development; 7) Have critical questions to lead to discuss and exchange opinions together; 8) develop critical thinking skills from studying the community context analyzing and presenting data in various formats; 9) creating new knowledge that can be used to create innovations for the community; and 10) creating a good attitude towards studying local communities.

4. Discussion

1) The study of creative economics learning approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand revealed that creative economy learning management is an integration of the concept of creative economy and as a learning base for students to focus on skills, knowledge and understanding of the economic system with a production system, products and services that rely on the existing experience and knowledge base by taking advantage of cultural resources, including economics, traditions, ways of life, ways of living, combined with knowledge. creativity and technology level to lead to the appropriate upgrading of one's economic system. In creative economy learning management that will promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand learning competencies in 4 areas must be promoted, consisting of 1) Competency in Community Engaged Learning, 2) Competency in Economic Literacy, 3) Competency in Environmental Consciousness Competency and Green Citizenship and 4) Competency in creative economic innovation development for sustainable communities. The results of the analysis are consistent with the issues of obstacles The Office of the National Economic and Social Development Council (2022) stated that formal learning is not yet connected to the way of life. Some children and youth lack trust in the education system. Therefore, opportunities must be created for knowledge development according to the multiple intelligences approach as well as creating a positive attitude towards education to create the growth of ideas and self-development to do new things. On the other hand, Inkaew & Napapongs (2020) presented the results of the analysis in the dimension of strengths and opportunities in learning management regarding the perspective on creative learning management that promotes and supports students in the process of solving problems in the real world with challenges for thinkers to focus on thinking that is new, modern and useful are basic factors that

affect the development of innovation. This is an answer to the country's development of science, economy, and industry which are important drivers of the progress of world society. The successful implementation of this concept depends on goals, needs, and readiness in various aspects. including teachers and students Therefore, it can be concluded that users should apply the concepts appropriately according to the situation and context, which will make the use of both learning concepts effective and most effective for the learners. Moreover, this is also in the same direction as Nethisriwat (2021) who suggested that the advancement of technology has resulted in rapid changes including lifestyles, social conditions, economics, the environment, and problems that arise with challenging and complex characteristics. This causes human skills to change to be in line with the changing social conditions. One of the important skills that should be developed for students is creative thinking skills. However, when the context of Thai education is taken into consideration, it has been found that it is still not possible to effectively develop creativity in students. This mentioned learning competency is also consistent with Somnual, Suthasinobon & Yamrung (2022) who presented that it is an important component of strong citizenship competency. It is a desirable characteristic within a student's personality. The components of strong citizenship competency include: 1) the knowledge and understanding aspect, namely 1) politics and government, 2) good citizenship according to the democratic way, 3) the constitution and laws, and 4) culture and traditions; 2) the skills aspect, namely 1) critical thinking skills, 2) Problem solving skills, 3) Characteristics and attitudes, namely 1) Respect for the rights of others and the law, 2) Public responsibility, 3) Social participation, 4) Accepting differences between individuals and 5) Characteristics of having morality and ethics.

2) Designing creative economics learning guidelines to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zone, Thailand, it was found that the researcher had designed a learning plan that integrated creative economy learning approaches. It is designed as a creative economy learning plan using Mangkhang's (2023) area-based learning cycle teaching strategy (AAAR Teaching Approach) together with 12 class periods of creative community economic learning activities, with evaluation results for the overall quality at the most appropriate level. This is consistent with the concept of Wongyai & Patthaphol (2020) who proposed that creative learning is learning that strengthens the potential of learners through the practice of creative learning activities (Creative activities) with teachers as guides (Coaches) and giving love and attention (Care) to learners to use their maximum potential in learning. Creative learning is learning that responds to current learning needs and focuses on deep learning for students. Deep learning is the combination of hard skills and aesthetic skills (Soft Skills) whereby in the New Normal era, students will have their own learning space, bringing out the power of thought and creative power that exist within themselves to benefit themselves and the public happily whereby happiness from learning and happiness from giving is the big problem of all learning.

To develop students to be learning persons in the future, students learn things with intention, pay attention, and put them to real use. Modern teachers in the new normal society organize creative learning through a variety of learning activities that respond to the nature and needs of learners, coach learners with love and kindness, and continually take care of the thought process and the learning process. Learners receive correct knowledge and understanding as well as practice various learning process skills that are the basis of self-learning as well as advanced thinking skills. Moreover, it is also in the same direction as Sararatna's (2016) idea that teaching in the 21st century will have a different form from the past. It must aim for students to create knowledge from the processes of knowledge acquisition, knowledge deepening, and knowledge creation. Therefore, didactics must aim to create knowledge from the process of learning by doing, from work, or activities in the context of problems in the real world. The mentioned learning processes will lead to the development of thinking skills from minimum skills to more advanced skills according to Bloom's taxonomy (Bloom's taxonomy), which is from thinking skills at the level of remembering, understanding, and applying as being the focus of learning in the industrial age towards thinking skills at the level of analysis, evaluating and creating, which is the focus of learning skills in the 21st century. In addition, the Office of the National Economic and Social Development Board (2009) has proposed that the concept of creative economy can be a tool to drive the Thai economy, which means driving the economy based on the use of knowledge, education, and creative work, and the use of intellectual property linked to cultural basis, accumulating knowledge of the society and modern technology and innovation.

3) The study of the results of using creative economics learning approaches to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand, it was found that students had the highest overall level of sustainable citizenship. This is consistent with the concept of Donkhaw (2016) who proposed that a creative economy is a concept that drives the economy based on the use of knowledge, education, job creation (creativity) and the use of intellectual property linked to cultural roots, social

accumulating knowledge and modern technology/innovation and it is in the same direction as Jaufar (2021) who suggested that sustainable citizenship must focus on developing the perception of sustainable citizenship in 3 dimensions: 1) expanding the perception of time with concern about equality and equality in various dimensions in the past, present and future impacts; 2) expanding the scope of area-based awareness by having responsibility on a global level, not just in one's own country; and 3) expanding the scope of ethical awareness by focusing on responsibility towards nature, society, environment, humanity and all living things. It is also consistent with Horne, et al.'s (2016) idea that sustainable citizenship positions citizens as agents of social change with an ethical and self-regarding stake in living with the rest of the world sustainably. Such citizens not only participate in sustainable households, but they must practice and place importance on creating awareness, discussion, and discussion about sustainability policies for common interests and maintenance of the world's ecosystem.

5. Conclusion

Studying creative economy learning management to promote sustainable citizenship for secondary school students in the Upper Northern Special Economic Development Zones, Thailand. It is a study of creative economy learning approaches to promote sustainable citizenship. Then, it was used to design creative economics learning guidelines to promote sustainable citizenship. and conduct a trial for use before evaluating the sustainable citizenship of secondary school students in the Upper Northern Special Economic Development Zones, Thailand. Things that were focused on were cooperation between teachers, educational institutions, and communities for learning management that responded to area-based education. with ideal science regarding the needs of students being placed importance on, leading to the design of learning management consistent with area-based identity, emphasizing community-based economic development in the upper northern region of Thailand.

6. Suggestions from the Research

- 6.1 Suggestions for Implementing Research Results
- 1. Preparing documents to be economic database should be promoted and local economy learning medias should be built in the community to bring about database and learning resources.
- 2. School administrators and community leaders should promote for cooperation among schools and the community in organizing periods of local economy study together with the community in order to reinforce economic perspectives through economy in students' locality.
- 6.2 Suggestions for Next Research
- 1. Integrated Vlog-based learning media should be developed to promote economic thinking skills of students in the culturally diverse areas of Thailand.
- 2. The demand for developing the local curriculum integrating substances in social studies for ethnic learners in local history should be analyzed.
- 3. Community economy knowledge should be managed to develop open digital learning resources for basic education students.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Auemaneekul, N. (2010). The Continuum from Action Research to Community Based Participation Research. *Journal of Public Health*, 40(1), 86-100.
- Beck, H. E., Vergopolan, N., Pan, M., Levizzani, V., Van Dijk, A. I., Weedon, G. P., ... Wood, E. F. (2017). Global-scale evaluation of 22 precipitation datasets using gauge observations and hydrological modeling. *Hydrology and Earth System Sciences*, 21(12), 6201-6217. https://doi.org/10.5194/hess-21-6201-2017
- Bezold, C. (2009). Aspirational futures. Journal of Futures Studies, 13(4), 81-90.
- Buijs, A. E. et al. (2016). Active citizenship for urban green infrastructure: fostering the diversity and dynamics of citizen contributions through mosaic governance. *Current Opinion in Environmental Sustainability, 1*(22), 1-6. https://doi.org/10.1016/j.cosust.2017.01.002
- Donkhaw, K. (2016). *Community economic development in the Northeast*. Nakhon Ratchasima: Management Technology major Suranaree University of Technology.
- Donkhaw, K. (2016). Creative Economy Models and Creative Behavior Affect the Long-Term Strategy of Entering the ASEAN Economic Community of Thailand. Nakhon Ratchasima: Suranaree University of Technology.
- Edward De Bono. (1982). Lateral Thinking: A Textbook of Creativity. Penguin books.
- Horne, P., et al. (2016). *Sustainability Citizenship in Cities: Theory and Practice* (1st ed.). Routledge. https://doi.org/10.4324/9781315678405.
- Inkaew, C., & Napapongs, W. (2020). The Concepts of Challenge Based Learning and Creativity Based Learning in the 21st Century. *Journal of Information and Learning*, 31(3), 47-55.
- Jaufar, S. (2021). Shaping of Sustainable Citizenship Among Young People of Kulhudhuffushi, Maldives and Hamilton, New Zealand: Context, Conditions and Experiences. *Jaufar Sustainable Earth*, 4(1), 1-12. https://doi.org/10.1186/s42055-020-00040-3
- Laoha, R. (2018). Student Relationship Management with Digital Activity Portfolio using Internet of Things Technology towards Sustainable Digital University. Bangkok: King Mongkut's University of Technology North.
- MacDonald, T. et al. (2018). The fourth delay and community-driven solutions to reduce maternal mortality in rural Haiti: a community-based action research study. *BMC Pregnancy Childbirth*, *18*(254). https://doi.org/10.1186/s12884-018-1881-3
- Mangkhang, C. (2023). Development of Social Studies Teaching. Chiangrai: Direct.
- Mangkhang, C., & Kaewpanya, N. (2021). The Cultivating Digital Etiquette: Transformative Online Teaching Approach to Pro-Active Citizenship in the Social Studies Virtual Reality Classrooms. *Journal of Educational Innovation and Research*, 6(1), 204-214.
- Mangkhang, C., Yimsawat, C., & Kaewpanya, N. (2021). Creative Learning Innovation According to The King Bhumibol's Science Through Community Economy for Promoting Green Citizenship of Secondary School Students in Upper Northern Special Economic Development Zones, Thailand. *Journal of Educational Innovation and Research*, 5(2), 207-222.
- Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education*, 1(1), 58-63. https://doi.org/10.1177/1541344603252172
- Michaelis, J. U., & Garcia, J. (1996). Social Studies for Children: A Guide to Basic Instruction. Boston: Allyn and Bacon.
- Micheletti, M., & Stolle, D. (2012). Sustainable Citizenship and the New Politics of Consumption. *The ANNALS of the American Academy of Political and Social Science*, 644(1), 88-120.

- https://doi.org/10.1177/0002716212454836
- Micheletti, M., Stolle, D., & Berlin, D. (2014). Sustainable citizenship: The role of citizens and consumersas agents of the environmental state. In A. Duit (Ed.), *State and Environment: The comparative study of environmental governance* (pp. 203-236). MS: MIT Press. https://doi.org/10.7551/mitpress/9780262027120.003.0008
- Ministry of Education. (2008). *Basic Education Core Curriculum 2008*. Bangkok: Agricultural Cooperatives Association of Thailand.
- Ministry of Education. (2015). *Policy of the Minister of Education*. Bangkok: Office of the Permanent Secretary, Ministry of Education.
- Munkham, S., & Munkham, O. (2004). *Learning to become a professional teacher*. 6th printing. Bangkok: Duangkamonsamai.
- National Statistical Office. (2018). *Survey of household information and communication technology*. Retrieved from http://www.nso.go.th/sites/2014/Pages/News/2561/N26-10-61.aspx
- National Strategy 2018-2027. (2018, 13 October). Royal Gazette. Volume 135, Chapter 82 A. pp. 34-43.
- Nethisriwat, W. (2021). Analysis of Instructional Design Process for Creative Classrooms by Teachers Following Creative Learning Spiral Training. Bangkok: Thammasat University.
- Nilchaikowit, T. et al. (2009). *The Art of Organizing the Learning Process for Change: A Manual for the Mental and Intellectual Process.* Bangkok: S.P.N. Printing Company Limited.
- Nilchaikowit, T., & Chandrasuk, A. (2009). "The art of organizing the learning process for change" Handbook of the Contemplative Process. Nakhon Pathom: Center for Contemplative Studies, Mahidol University.
- Nilphan, M., & Wattanaworachai, S. (2015). Development of learning innovations at the level of Participate in basic education with the community using the museum. and local learning resources for Promote creative learning. *Veridian E-Journal, Silpakorn University (Humanities, Social Sciences and arts)*, 8(1), 48-61.
- Office of the National Economics and Social Development Council. (2009). *The Creative Economy*. Bangkok: Office of the Prime Minister.
- Office of the National Economics and Social Development Council. (2018). *National Economics and Social Development Plan 12th issue 2017-2021*. Bangkok: Office of the Prime Minister.
- Sararatna, W. (2016). Innovation and the 21st Century Educational Paradigm. *Journal of Yanasangvorn Research Institute Mahamakut Buddhist university*, 7(2), 268-283.
- Sararattana, W. (2016). Innovation in the educational paradigm of the 21st century. *Yanasangworn Research Institute Journal*, 7(2), 268-283.
- Somnual, S., Suthasinobon, K., & Yamrung, R. (2022). Competency Factor for Active Citizenship Competencies Enhancing of Elemenatry School Students. *Journal of Social Science and Buddhistic Anthropology*, 7(12), 175-186. https://doi.org/10.11591/ijere.v12i4.25649
- Sriwichailamphan, T. (2013). *Community economic development*. Chiang Mai: Faculty of Economics Chiang Mai University.
- Sukkasem, O. (2014). Special border economic zones are certain to emerge in this era. *AEC world economic base*, 34(2), 2-72.
- Sukkasem, O. (2014). Special Border Economic Zones are Certain to Emerge in this Era. *AEC world economic base*, 34(2), 72.
- Suthijaree, C., & Trakansirinont, W. (2020). Promoting strong citizenship through historical consciousness: "Father Pichai" and promoting strong citizenship of the Corum people. Uttaradit Province. *Social science journal Naresuan University*, 16(1), 227-249.
- United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. General Assembley 70 Session.
- Wongyai, W., & Patthaphol, M. (2020). Create Your Coursepacks. Bangkok: Srinakharinwirot University.