

Article

Contemporary Curriculum Model for Arts Education in Taiwan

Ming-Hsien Cheng¹, Jessie Hsiao-Shien Chen² and Chyi-Chang Li^{3,*}

¹ Department of Fine Arts, National Changhua University of Education, 50007, Taiwan; jimcheng@go.edu.tw

² Center for General Education, National Taichung University of Education, 40306, Taiwan; jessiehsc@mail.ntcu.edu.tw

³ The Graduate School of Arts and Humanities Instruction, National Taiwan University of Arts, 22058, Taiwan;

* Correspondence: lialan@ntua.edu.tw; Tel.: +886-928-373-616

Received: Nov 17, 2022; Accepted: Dec 17, 2022; Published: Dec 30, 2022

Abstract: At the end of 2014, Taiwan proclaimed “competency-driven” as a new goal of education. Arts education curriculum changes from a traditional ability-based approach to an approach of more complex pedagogical and radical education outcomes for the new requirement. This article presents how and what a curriculum of competency-driven arts education is emerging based on the proclamation. We define competency-driven arts education as self-determination to solve problems by integrating knowledge, ability, and attitude of arts in the circumstances. This operational definition is used to set a scene of education for constructing a curriculum model, including the path of instruction, learning, and subject. The crucial and competency-driven features are stemmed from discussions that inspire curriculum implementation not on what is taught and acquired but on how to make decisions to show one's value judgment.

Keywords: Ability-based education, Competency-driven arts education, Curriculum model, Value judgment

1. Introduction

“Education is a normative enterprise. It is a process aimed at the achievement of certain virtues....” (Eisner, 1992, p. 302). The business of education changed all the time following the development of society. Learning and teaching under the directions set by the curriculum are the activities that learners can go through in the education process. At the same time, a specific subject offers a runway to obtain the teaching activities done (Eisner, 1992). A specific subject offers a runway named curriculum for education to reach the goal (Eisner, 1992), which makes the curriculum centered on education. The curriculum is defined mainly as a runway and provides pedagogical sources for teaching. Teaching resides in the curriculum as the center of education.

As a member of a global community, Taiwan announced the newest national curriculum guidelines in 2014 that reflect the current education movement that is competency-based in the world. The *Curriculum Guidelines of 12-Year Basic Education: General Guidelines (General Guidelines)* are significant to all disciplines mapping a new era of education. There are three highlights of the curriculum guidelines mentioned chiefly: a) “Competency” is more complex than “competence.” Competence is the ability for *Grade 1-9 Curriculum Guidelines* and leads to ability-based education. Twelve-Year Basic Education stresses that competency is more than ability, knowledge, and attitude (Ministry of Education, 2014). b) Learning outcomes are not what teachers have taught but how students perform in the real world, and c) the position of curriculum development switches from a teacher to a student-centered perspective. These features indicate that the education status evaluated at the end turns to the process of curriculum establishment. Eisner (1992) called our attention to the education process and requested a different way of curriculum development.

These indicate a critical change in curriculum development and practice for educators not only for guiding students in applying learned knowledge and skills in their life but integrating their pedagogies and models of curriculum. The essence of the curriculum model for this new approach is that teachers must work hard rather than write a lesson plan to fit into the stated curriculum guidelines. Curriculum development must not be restricted to the aspects of knowledge, skill, and attitude that are “so-called” core competences in *Grade 1-9 Curriculum Guidelines*. In the 2014 curriculum guidelines, competency replaces knowledge and ability, and learning outcomes of mastering subject matter become assessing problem-solving by considering discipline competency. Those curriculum transformations, such as goal, process, content, and structure of schooling, bring up issues of how the arts curriculum must be. Mostly, taking curriculum reform to correspond with educational reform leads to rebuilding the curriculum model.

Several curriculum approaches nurture the emergence of *General Guidelines* that take the final step of education reform in Taiwan. The roots of curriculum guidelines can be traced back to the definition and selection of competencies two decades ago

(Wu and Chan, 2018), such as the integrative approach and subject-based approach. The Organization for Economic Co-operation and Development's (OECD) learning compassed 2030 framework (OECD, 2021). The above approaches create tension among students, curriculum developers, and teachers. Issues of curriculum development in the Arts Domain are discussed in this article, particularly on the viewpoint of curriculum structure and the essential learning foci shown in the *Arts Domain Curriculum Guideline* (ADCG), which reflects the features of the curriculum model for the idea of competency-driven. Essential learning foci are the axis, including performance and content of learning, that bridge core competencies from *General Guidelines* and the goal of the Arts Domain. The structure of essential learning foci sets out the curriculum materials and assessment of learning outcomes for instruction. However, the art teacher is required to interpret and transform core competencies of arts for developing curriculum and connect competencies to teaching and assessing.

2. Research Problems and Method

Several features of arts curriculum acquired from *General Guidelines* are introduced in ADCG, including competency-driven arts learning, aspects of assessing learning arts, integrated learning of arts, lifelong learning of arts, student-centered arts curriculum, issue-related curriculum, and assessment-based curriculum. Those features depict a big idea that arts education reflects one's life in many ways, such as thinking, decision-making, communication, problem-solving, and connecting to the community. Arts education plays an essential role within an education system, providing the essence of perception, observation, imagination, creating, symbolizing, criticizing, and integrating into/cross disciplines. From the traditional perspective, aesthetic experience in an art classroom regards performing artistic activities such as making artwork, singing a song, or playing musical instruments. Generally, aesthetic experience is the act, perception, attitude, judgment, or expression of observation, attention, and desire involved with viewing or encountering art. Smith (1989) points out two different types of experiences while we undergo art in school: artistic experience and aesthetic experience (Smith, 1989, pp. 49–54). According to his assertion, the artistic experience relates to the aesthetic response and skill of art-making in a class, while the aesthetic experience connects the artistic experience to the real world. He claims arts education must be a form of aesthetic education based on the conceptual analysis of aesthetic experience in education.

Consequently, arts education goes beyond artistic experience, which means performing, mastering media and technique, or talking about artworks. Arts education aims to equip students with exploring, reflecting, connecting, expressing, integrating, and thinking, which are the most critical competencies of life. The five components of aesthetic experience are perception, cognition, imagination, emotion, and discovery (Black, 2000). Aesthetic experience is complex but learnable. Thus, experiencing a particular aesthetic value or activity requires a well-designed activity in an art class that carries out a well-controlled and systematically developed curriculum. Therefore, learning in arts requires a different recognition of concepts, curriculum model, and pedagogy from the past according to the new curriculum guidelines. A curriculum model reflects not the world of postmodern arts but the world that the student will confront.

The idea of aesthetic experience has to take place in all walks of life (Uhrmacher, 2009, p. 620), which leads a curriculum to be a particular arrangement and situated learning process and content. Critical issues of implementing ADCG include how to set up and carry out the goals, contents, process, structure, and practice of curriculum that takes students into the core of education. Thus, we present a competency-driven arts education (CDAE) curriculum model and figure out how to define the competencies in the domain of learning and teaching.

A concept model of CDAE is emerging after a discussion on the development of competency-based education (CBE) and its curriculum model. A documentary research method is used with a view of CBE transforming into competency-driven education (CDE) in this study. The basic rules of appraising and analyzing documents include authenticity, reliability, meaning, and theorization (McCulloch, 2004). The authenticity of this study is collecting and reviewing original documents. Nevertheless, the availability and representativeness of documents are researched for reliability. Researchers pay attention to the context of how documents are produced to comprehend their meaning (Marwick, 2001). Finally, a theoretical framework is developed to interpret the documents (McCulloch, 2004). Mainly, the purpose of the study is to clarify misunderstandings in CBE before we build an arts curriculum model using the concept of competency-based learning (CBL). Finally, a short depiction of CDAE is given to integrating characters of CBE from diverse countries. The following section presents the definition of CDAE for mapping the path to creating an art curriculum.

3. Defying Competency-driven Education

“Core competence” is a fundamental concept for *Grade 1-9 Curriculum Guidelines*. Competence is a synonym for ability and works as an indicator for teaching and benchmarks of learning outcomes. *Grade 1-9 Curriculum Guidelines* have been understood as standard-based or outcomes-based curricula in terms of competence. Competence is a predetermined subject-basis ability which

performed at the end of the curriculum. In other words, the ability of arts education for each learning stage is developed and set up before teaching. The objects of curriculum and learning are predetermined in the curriculum guidelines, and student's learning outcomes are based on the predetermined competencies. The goal of instruction and learning is to master or handle the subject. Understanding the differences in competency in CBE from core competence is always critical, because it may be confused with core-competence education in some ways.

CBE is the root of CDE in Taiwan and explains the differences in competency from ability or competence in *Grade 1-9 Curriculum Guidelines*. CBE is the same approach in curriculum development as core-competence of *Grade 1-9 Curriculum Guidelines* but with slight revision in its essential purpose and process (Cai, 2010, 2011a, 2010b; Wu and Cai, 2017; Xu, 2019) which demands a different curriculum model. Competency does not show the object of arts curriculum or student learning outcomes while competence stands as concrete criteria for evaluating curriculum and assessing learning results, too. Competency is rather than a practical approach and value judgment regarding carrying out aesthetic concepts in life. In contrast, competence is acquiring artistic knowledge and skills from the curriculum. CBE is known to curriculum development as a competency approach rather than core ability, basic ability, and discipline knowledge in Taiwan nowadays.

3.1. Brief Development of CBE Movement

To present, CBE transforms through five waves of movement and demonstrates its goal for education, training, and learning (Ford, 2014). According to Brown (1994), the first influence of CBE is on vocational education, the second effect concerns the learning model of education, the third phase shifts back to the formative assessment of workers' training in vocational education, and the fourth phase focuses on well-known teacher education. Based on Jones and Voorhees' (2002) report, Ford suggests that CBE's fifth movement concentrates on the development and transferability of learning outcomes rather than on what is taught. CBE changes focus from the result of education to the process of learning in curriculum and teaching. In responding to online/distance learning recently emerging worldwide, we also consider the sixth generation of CBE calling for increased productivity and effective learning of constructing and applying outcomes that are demonstrated.

CBE is defined as the educational process to facilitate learners' desired outcomes by performance with the specified competence in a task related to success in life roles (Schalock, Spady, and Hathaway, 1976, pp. 10–12). The subject does not provide the desired end in the curriculum but only sources of knowledge and skills probably used at the end of learning. According to Evans, Graham, and Lefebvre (2019, p. 301), from the 1980s to 2000 is the watershed of CBE. Before the 1980s, the rationale was learning to master discipline knowledge, namely proficiency-based education. From 2000 to the present, education turns to ask students to demonstrate what they have learned or personalized learning.

CBE spreads out from the USA to other countries on teaching, training, and teacher education over decades. In Australia, more restrictive curriculum standards for arts education are studied, and the findings suggest that competency-based arts education (CBAE) is an integrated approach to bring students a view of future workplaces (Bryce and Harvey-Beavis, 1997). A similar concept of studies in lifelong learning outcomes with the portability of skills emerged in the UK at the end of the last century (Voorhees, 2001, p. 7). It seems that CBE affects an international movement of educational reform. However, Taiwan paid no attention to this emerging idea of arts education during that time. Meanwhile, we were involved with an integrated curriculum from 2000 to 2008. In 2014, we changed the goal of education from competence to competency and brought its idea into arts education in 2019 that caught the attention of curriculum reform.

Competency-driven Education (CDE) is known as the theoretical foundation of *General Guidelines* (Ministry of Education, 2014) and ADCG to label educational reform. Instruction and learning of all domains are requested to be competency-driven. Competency is critical and is the main framework of education for all subjects, disciplines, and learning stages from elementary to high school. Our curriculum guidelines frame standards rooted in the basic idea of competencies that go beyond the complement of knowledge, ability, and attitude. Competency focuses on one's special behaviors, attitude, or determination in terms of personal characteristics. According to Wu and Chan (2018), CBE takes root in ability-based education (ABE) and goes beyond. This exposition makes teachers feel comfortable with its readable and understandable components because ABE is the main idea of the *Grade 1-9 Curriculum Guidelines*.

However, it is dangerous to simply transfer its meaning from *Grade 1-9 Curriculum Guidelines* into the movement of CBE. From the perspective of development, the USA has a different point of view on CBE from Europe (Wu and Chan, 2018). Essentially, CBE includes three matters of learning outcomes, lifelong learning, and systematical control (Ford, 2014; Joyce, 1971; Nodine, 2016; Palardy and James, 1972; Scott, 1982; Spady, 1977; Voorhees, 2001), and it is prevailing from Northern America to Europe. The above aspects are principles for conducting a program, developing a curriculum, or setting up learning goals but do not necessarily appear *in* all of them. Organizing the teaching process, learning contents and outcomes must be seriously considered from system control, especially on the issues of curriculum evaluation, teacher certification, student academic achievements

assessment, and so on. Furthermore, an additional crisis such as teaching arts from the domain rather than a specific subject pops up for elementary schools of integrating arts disciplines for curriculum development and practice. In other words, an art teacher is demanded rather in music, visual arts, or dance/drama. This typical artistic ability-based learning and teaching were demanded by teachers two decades ago in Taiwan. Arts competency-driven curriculum and learning have a different view on Arts Domain, as arts education centers its pedagogy on contents and outcomes to process and make a judgment with aesthetic experience. However, Taiwanese scholars and educators believe competency is learnable and teachable no matter what the circumstances are. While we approach the new era of competency-based learning (CBL) of the Arts Domain, the content of curriculum materials and behaviors on making/performing is not the only consideration for curriculum development, in contrast to the priority of applying performing experience in daily life and making judgment appropriately and aesthetically. A curriculum for CDAE aims not to bring students with fulfilled artistic skills and knowledge which is an artistic experience only but aesthetic experiences mostly in life. Artistic skills offer students the knowledge and techniques related to the world of arts, but aesthetic experience takes students to encounter situations and problems in the real world. A curriculum of arts education has to go beyond artistic experiences and acquire aesthetic experiences as aesthetic education. Aesthetic experiences are masked by the aesthetic concept and value judgment while artistic skills and knowledge are delivered. According to Uhrmacher (2009), the aforementioned experiences increase students' sense of learning and equip Dewey's "heightened vitality" (p. 620). Uhrmacher's six themes of aesthetic education for heightened vitality are connections, active engagement, sensory experience, perceptivity, risk-taking, and imagination recommended. They broaden our view on the CDAE curriculum as well as contribute to the curriculum model finally.

3.2. Basic Considerations for CBE

Although it still lacks conceptual and theoretical clarification of CBE and how to transform its idea in the curriculum to competency-driven education, recently, pursuing competencies for the 21st century in the enterprise of education becomes the priority goal for most countries, but having different ideas and content regarding its definition. We attempt to build a theory of CDAE by taking elements of the CBE and resulting outcomes. We also learn from Sturgis, Patrick, and Pittenger's report (2011) regarding a high-quality CBE. They claim five CBE features for curriculum development: demonstration of mastery, empowering students, meaningful assessment, satisfying learning needs, and creating and applying to learn. Haanstra (2013) indicated a broader boundary in the characters for competencies called for CBE, namely lifelong learning, language, innovation, critical skill, and multiple disciplines, including reading, math, and science. He demonstrated different angles on CBE in the characteristics of the curriculum, curriculum contents, and teaching goals.

Modern CBE curriculum centers on students' learning circumstances and demonstration of decision-making for curriculum. These elements present the demanded approaches and/or curriculum contents of formal education for the 21st century and far beyond its viewpoints of educational progressivism from the last century. Along with the lines drawn by elements and features, we consider the definitions of competency for curriculum and teaching as follows:

- (1) The learning outcomes are not the goal of CBE but the experience of learning and the process of the curriculum.
- (2) Real-world life requires abilities that are more complex than knowing, doing, and willing but decision-making and determination for overcoming difficulties within restrictions.
- (3) The content of curricula is not the main body of curriculum development for CBE but comes together with an assessment to reflect what and how learning happens.
- (4) Mastering the discipline materials that are not for a sophisticated learner while CBE asks for a comprehensively equipped learner with the literacy from the discipline for confronting the situation of problems.

These features demonstrate that CBE is not just a formula as "knowledge + skills + attitudes". These components in *Grade 1-9 Curriculum Guidelines* are individual goals. Learning outcomes from this approach including knowledge, skill, and attitude, represent the goal of curriculum/lesson which yet can be reached individually in terms of art ability. CDE highlights more on an integrative performing that turns CBE into "knowledge x ability x attitudes x decision-making." The idea of "multiplication" means the learner's attitude and inner decision-making to empower one's learning outcomes by performing an aesthetic value judgment in the sense of competency-driven education. This leads education to go beyond the circumstances of the school. The learning outcome is still the criteria for assessing student achievement while its rubrics focus on how and why artistic and aesthetic experiences are performed in the real world particularly. An inner determination integrated with outer skill and action constructs one's aesthetic performance as the competency-driven curriculum. This concept indicates that the new era of education is not only a cumulation of knowledge plus skill but rather a model of multiple aspects of decision-making and implementation.

3.3. Curriculum Features of CDE

The concept of the CDE curriculum is based on our understanding of CBE as well as differentiating from CBE. CDE cannot be treated with standardized curriculum goals, pre-dominates outcomes, or predetermined behaviors, but be out of the process of learning through sophistication and understanding of place, situation, competencies, and problems. CDE is brought to school by taking foci from different positions on education to depict varied visions of education such as integrated curriculum, learner-centered/self-paced learning, lifelong education, mastery-based learning, outcome-based learning, personalized learning, performance-based education, problem-based learning, competency-based learning, professionally oriented education, real-life learning, or standards-based reform, and so on. These have different curriculum models from the traditional education approach to present and require different foci for pedagogy, curriculum, and instruction and bring competencies onto learning to make the CDE curriculum better than CBE.

In responding to OECD, Taiwan uses CDE to replace CBE around 2008 (Wu and Chan, 2018). The critical difference is the usage of terminology in the *General Curriculum Guideline*: core competency instead of basic ability, core ability, and knowledge. The goal of education for the future must be teaching competencies rather than ability and knowledge. Most studies (Fan, 2016; Hong, 2008; Huang, 2017; Tsai, 2011a, b, 2014, 2016; Wu, 2017) define competency-based education¹ as a holistic education to cultivate learners with adequate competencies as knowledge, ability, and attitude or value (Wu, 2017) or power of judgment (Hong, 2008). The last aspect of competency-based education may not be recognized by all scholars. Nevertheless, there is no argument or discussion toward the definition of competency for educating the next generation, thus essential knowledge + key skills + core attitude in facing future life is well known to all (Tasi, et al., 2014, p. 2). However, CDE shares basic concepts with CBE in perspectives from Western countries (Wu and Chan, 2018) or the former National Curriculum Guidelines in Taiwan.

Although there are multiple ways of looking at CBE, we have three features of the curriculum that asserts CBE (Lurie, Mason, and Parsons, 2019, p. 5):

- (1) Learning is *measured* in competencies, and either quantified without reference to seat time or mapped to measures of seat time.
- (2) Students *advance* from the course or complete the program based on mastering all required competencies.
- (3) Courses or programs can be substantially “*self-paced*” by students.

Competencies learned from the “process” of CBE based on these features bring out an image of a curriculum model for CBE/CDE that is different from the traditional curriculum (Fig. 1) (Gruppen, Mangrulkar, and Kolars, 2012).

The curriculum encloses the sources and builds the boundary for teaching, including knowledge, skills, or attitudes in the traditional way. The CDE curriculum model is based on the unique demand for future life and embraces the process of learning and instruction. The outcomes of education are not spent on what and how many materials and contents are presented and learned but on what degree learners go through and experience the growth of recognition on making value judgments in discipline knowledge and skills. The model of curriculum represents discipline structure and the process of education. On the contrary, competencies are the real-world tasks that students confront and set what must be learned in the CBE model. CDE model is emerging from the CBE model presented in Fig. 1 considering society as the student’s real world. Competencies are produced in the process of curriculum practice while learning outcomes are starting from life. CDE curriculum, in this way, aims to meet students’ life. CDE curriculum considers the state of learning within the community, society, and the world where students live. The critical idea of the CDE model is to drop off curriculum standards/materials with the aim of teaching and to take what and how the society/world students live in needs. The CBE/CDE model shows differences in consideration while working on curriculum development and assessment. Discipline rules curriculum, teaching, and assessment, but the world we live in plays the role of education and assessment in CDE.

¹ Competency-based education is used in the reports/articles. The English version of general curriculum guideline published after 2014 uses competency-driven.

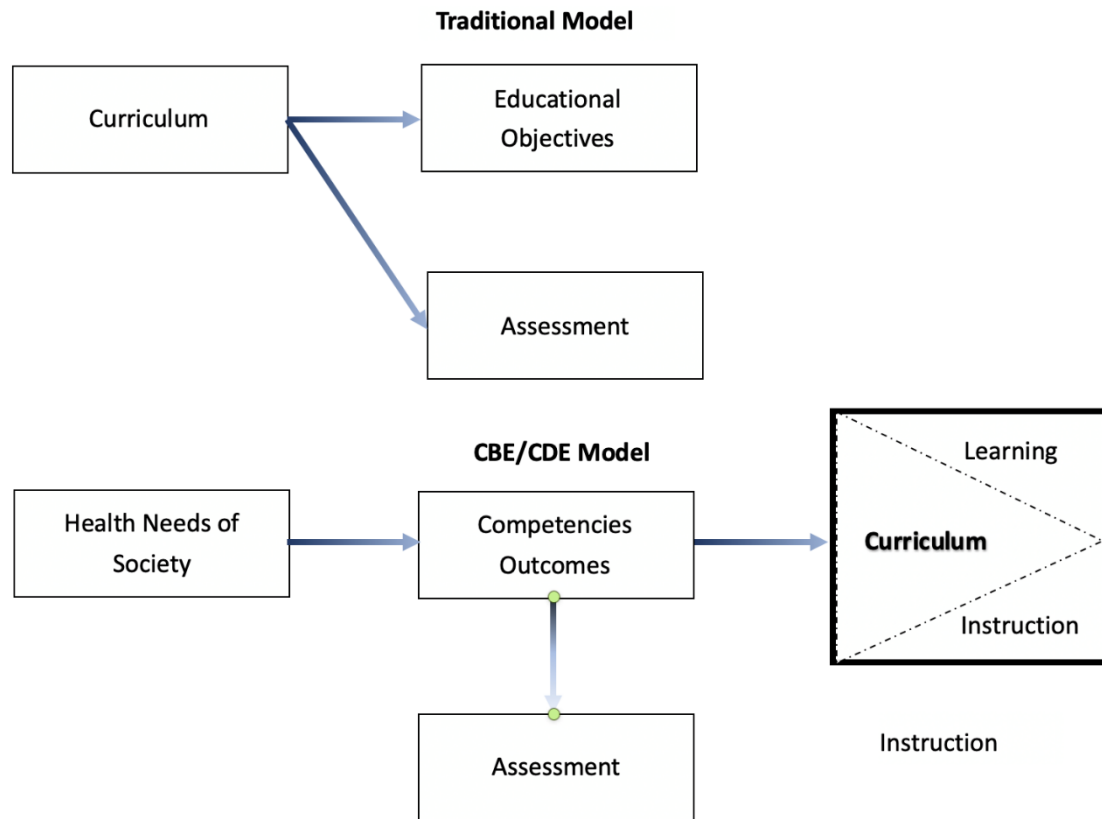


Fig. 1. CBE/CDE Curriculum Models and Features (adapted from Gruppen, Mangrulkar, and Kolars, 2012).

3.4. Learning Aspects of CDE and Arts

Exploration of the concept of art curriculum for CDE lacks in Taiwan. An art-based approach to teaching competencies is reported (Deng, 2014) based on the Arts-based research in education regarding the general idea of CDE. Pedagogical planning is the main issue of previous studies rather than the structure and essence of the curriculum. There is no discussion on the concept of competency-driven or competency-based arts education while one article on art teacher education is related to CDE (Chen, 2018). However, it addressed a teaching method for preparing art teachers rather than for developing a competency-driven art curriculum. It is argued that interpreting and transforming the meaning of curriculum guidelines into lesson plans is critical to carry out CDAE. A well-structured teacher education curriculum is in great demand for a qualified art teacher. Teaching students to be familiar with expression, appreciation, and performance is what the teacher education curriculum must deal with. Arts competencies for teachers or students are restricted within the three facets of the world of arts. Previous studies provide a limitation in understanding what CDAE must be and what a structured art curriculum looks like.

A competency learning model (CLM, Fig. 2) proposed by Voorhees (2001) emphasizes that the learning process is the core of education while learning outcomes are not the results of what education purposes but the performance in real life.

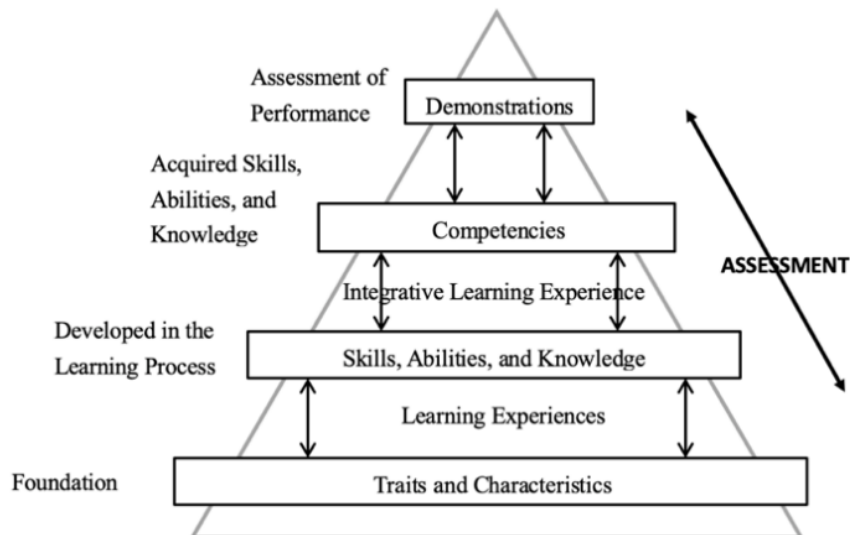


Fig. 2. Competency Learning Model for CDE (U. S. Department of Education, National Center for Education Statistics, 2001.)

CBE/CDE curriculum model (Fig. 1) presents three aspects of the learning process: the world of education, competencies for living, and assessment. Fig. 2 depicts a CLM that bears all curriculum contents into the CBE/CDE curriculum model of Fig. 1. In education, activities happen in classrooms that are the sound needs of society as shown in Fig. 1. Competencies for living symbolize the learning outcomes of students as presented in Fig. 2 which students must demonstrate their confidences in aesthetic decision-making. The assessment is a direct measurement of the education process and teaching. Based on the common sense of the CBE and CDE model, a learner demonstrates what is learned and performs a successful task in a real circumstance as the top goal of learning (Fig. 2). CLM shows curriculum developed from the foundation to assessing performance where creative thinking is demanded by learners.

4. Competency of Arts Education in Curriculum

Aesthetic experience exercised in aesthetic education in any discipline of arts is common from the last century. Experiences in diverse aesthetic senses on artworks require multiple sensories in different art subjects but not the principles of aesthetic experiences and values. A CDAE curriculum model shares the concepts of aesthetic experience with various theories. The ability and attitude of making an aesthetic value judgment in life are set up in a CDAE curriculum as shown in Figs. 2 and 8 for art courses.

4.1. Arts Competencies in the Guidelines

The basic idea of *General Guidelines* (Ministry of Education, 2014) in Taiwan is a CDE approach to foster “lifelong learners” in twelve-year basic education. There are 9 core competencies to frame all domains and disciplines (Fig. 3).

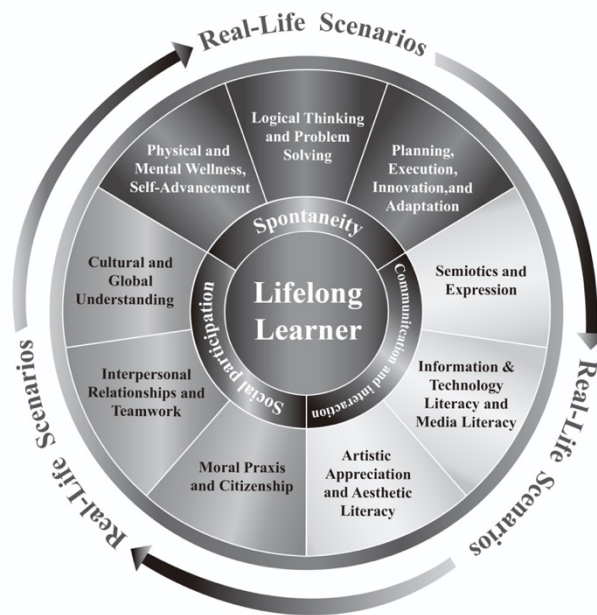


Fig. 3. Core competencies of *General Guidelines*.

Dimension B² competency “Communication and Interaction” has 3 subitems. Items 1 and 3 (coded as B1 and B3) are directly related to arts. From a general viewpoint, all items build a relationship to artistic competency while B1 and B3 are the most vivid. This understanding gives arts education a diverse role in the education system from Grades 1 to 12. B1 declares possessing the ability to use various types of symbols including arts to communicate and interact with others, while B3 addresses to have the ability of arts awareness, creation, and appreciation, as well as experience artistic culture through reflection on arts in daily life (Ministry of Education, 2014, pp. 8–9). The explanation pictures how competencies of arts are critical for all curricula. B1 and B3 also sketch the line of interdisciplinary among different domains. Arts education is guided to take curriculum models such as arts-centered curriculum, arts-based research for education, or arts-based action research emerging from Nordic Countries recently (Coutts and Eça, 2019; Wilson and Ruiten, 2019).

Education through artistic activity approach is related to human activity as claimed by Barone and Eisner (1997). They set up arts-based research for education (ABRE) and inspire various curriculum approaches in all subjects. It is not declared in *General Guidelines* but the movement of interdisciplinary replacing integrated curriculum is well known among teachers in Taiwan. They assert that ABRE provides artistic qualities in the process of exploration, perception, application, creation, and imagination. Artistic activity is a crucial element in the CDE of *General Guidelines*. ADCG presents essential learning foci to indicate what and how arts competencies are asked at different education levels as well as in curriculum materials. Both indicators of performance and content are constructed according to cognition development. ADCG demonstrates the structure of competencies and the curriculum model. Art curriculum contains three artistic activities: expression, appreciation, and practice, and each has its core competencies to echo *General Guidelines*’ competency.

4.2. Arts Competencies in the World

Many countries have standards or guidelines to proclaim educational goals and develop curricula, and arts education is included in the package although not every country has the same subjects such as music, visual arts, dance, and drama. The United States establishes a National Education Standards and Improvement Council according to the *Goals 2000: Educate America Act*, and arts are the first academic subject to complete standards under the law while National Standards for Arts Education was released in 1994.

Not long after the National Standards were released, the Arts Education Advisory Committee of Ohio in America proposed a Model Competency-Based Program, the so-called Ohio Model, also known as Comprehensive Arts Education. Through years of development, the State Board of Education adopted the Model in 1996 (Ohio State Department of Education, 1996). The

² Dimension B contains “B1” Semiotics and Expression, B2 Information and Technology Literacy and Media Literacy, and B3 Artistic Appreciation and Aesthetic Literacy.

principles of the Model guided the curriculum development and instructional decision-making. Comprehensive programs in arts must be for all learners from pre-K to grade 12, contents must reflect the goal of the model and be grounded in National Standards, instructional process actively must engage learners, emphasizing higher-order thinking skills and complex demonstration of learning, valid assessment for program objectives, and preparing learners for lifelong learning (Ohio Department of Education, 1996).

America's National Core Arts Standards (Fig. 4) (NCCAS, 2014) were built on the evidence of student learning outcomes as well as research-based discoveries. These standards suggested a sequential and standard-based approach to arts education, therefore learning events must happen in a context and opportunity-to-learning conditions. Arts Standards of America emerged from the artistic process, in terms of creating, performing/presenting/producing, responding, and connecting. Two or three anchor standards defined one artistic process that reflects the commonality and specificity of each discipline (NCCAS, 2014).

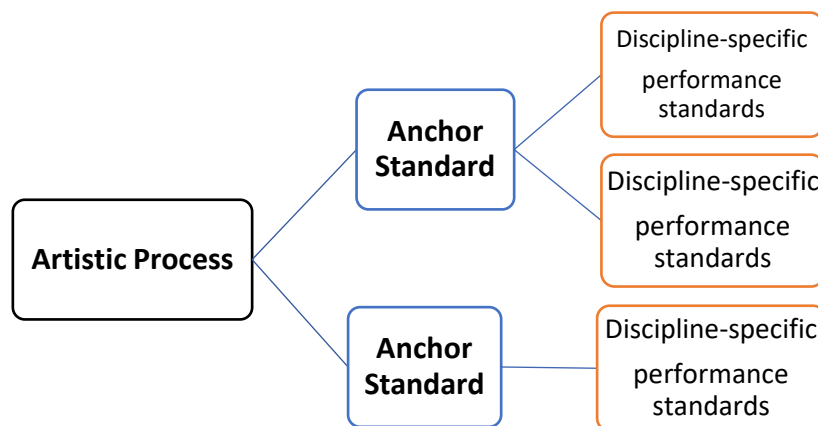


Fig. 4. Design of American Arts Standards Model

Note. From "America's National Core Arts Standards," by National Coalition for Core Arts Standards, 2014. Reprinted with permission.

Among all the states in the USA, New Hampshire was the only one that established Arts Model Competencies. New Hampshire has worked on competencies since 1997 and adopted CBE. New Hampshire State Board of Education adopted Arts Model for Graduation Competencies in 2015 for better student preparation above high schools. Based on Arts Standards, Arts Model Competencies focused on creating, presenting, responding, and connecting, which spanned all grade levels and all arts disciplines. The connection was crucial for this model to bring art knowledge and skills rising to an integrative task for life.

European Network for Visual Literacy (ENViL) surveyed ten European countries to illustrate competency models and visual arts curricula by inquiring about facts and interpretive questions. Two dimensions were identified in the visual arts competency model: responding and making. Responding included appreciating, sensing, spectating, and apprehending, while making means production, expressing, creating realizing, constructing, and so on (Fig. 5) (Haanstra, 2013).

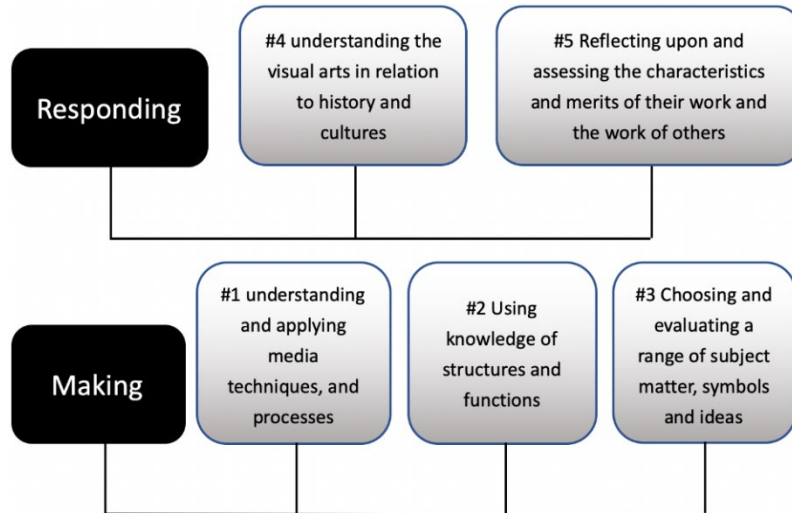


Fig. 5. Visual Arts Competency Model of ENViL

Note. From “*Research into Competency Models in Arts Education,*” by F. Haanstra, 2013. Reprinted with permission.

Applying, using, choosing and evaluating, and reflecting are the key components for living in the future as well as are required for a successful community that presents this model as a CDE approach. A variation of the aforementioned model is adding an applied ENViL dimension, creative thinking or reflection, to responding and making (Fig. 6).

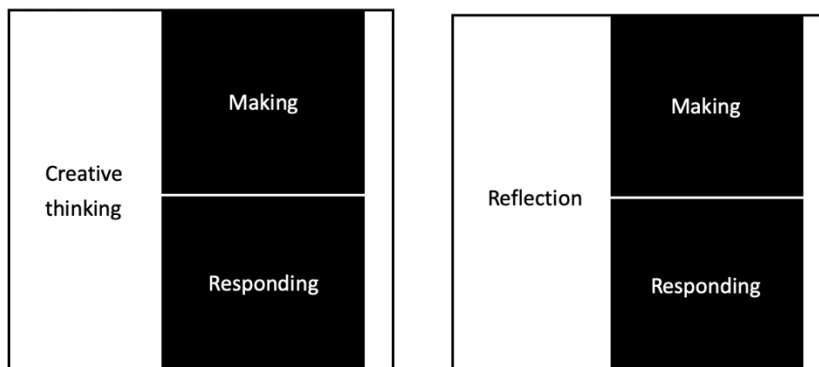


Fig. 6. Three-dimension Competency Model of Visual Arts

Note. From “*Research into Competency Models in Arts Education,*” by F. Haanstra, 2013. Reprinted with permission.

Several scholars addressed that dimensions are interrelated or overlapped, thus Dutch model (Haanstra, 2013, p. 4) is presented as shown in Fig. 7. Nevertheless, Australia supports the idea of interrelatedness while responding (sensory, cognitive, and affective), realizing, and generating consist of three dimensions.

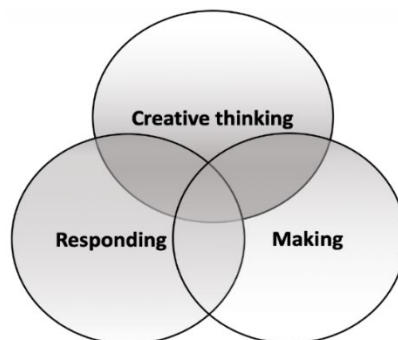


Fig. 7. Dutch Competency Model

Note. From “*Research into Competency Models in Arts Education*,” by F. Haanstra, 2013. Reprinted with permission.

NCCAS (National Coalition for Core Arts Standards) in the USA inquired about arts standards from 13 countries and regions in 2011. The findings revealed the prevalent reasons for studying arts as follows: (a) for cultural understanding, (b) fostering skills of critical and creative thinking and problem solving, (c) for communication, and (d) cultivating pleasure and enjoyment as well as fostering a sense of well-being (College Board, 2013). Though every region had standards for music and visual arts, art media varied from place to place, nevertheless, arts standards were not applied at all levels in every country (College Board, 2013). According to the investigation results, College Board (2013) reported that nations shared certain views on arts education throughout the world. As mentioned above, most arts standards fall in three areas: (a) generating/problem solving, (b) expressing/realizing, and (c) responding/appreciation. In some aspects, Taiwan shares commonalities in arts education with several countries in the world.

According to reviewed competency models in arts curricula globally, responding and making represent the essence of arts education while creative thinking, reflection, or problem-solving demonstrate the applied dimensions as the most common views for arts education. Furthermore, the global common sense on CBE and arts education includes interpreting lifelong learning, real-life artistic/aesthetic experience, and the process of arts competencies in different ways. All the models discussed above have structures of arts competencies and aspects of artistic activity.

4.3. CDAE Curriculum Model

CDE raises the concept of CBE in the same structure (Fig. 1) to make its progress from the traditional approach of ABE. Taking CLM as a fundamental framework of learning content for arts competencies, we find the same learning aspects of arts but different core contents for art learners (Fig. 8). We adopt the essence of CDE aligning with ADCG to transform the conceptual model of CDE in arts into a CDAE curriculum model.

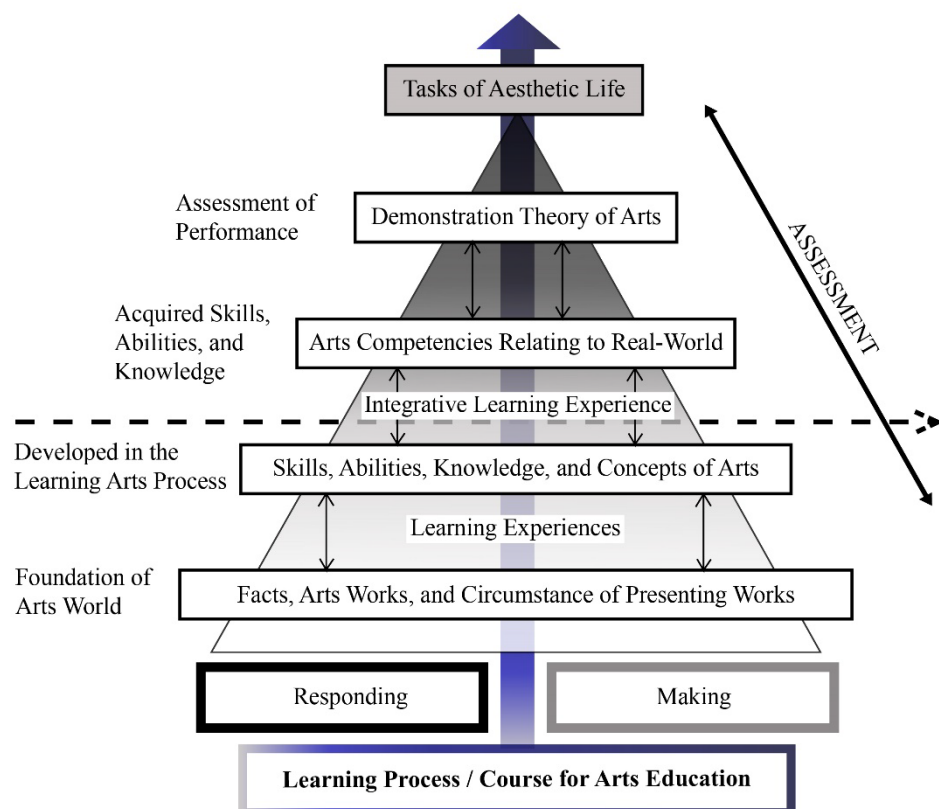


Fig. 8. CDAE curriculum model.

In this model, curriculum flows from bottom to top showing the process of learning and consequences of curriculum, and learning experiences are the main structure of CDAE through knowledge and skills in the art to guide learners in a successful

aesthetic life. This model also suggests the pathway for assessing students' learning outcomes. The basic competency of arts evolved from the flow shows the curriculum integrated abilities and knowledge into the circumstance of the real world.

Based on CBE and CLM, there are three learning aspects of the model: aesthetic "Responding" to the real world, "Making" arts works to present one's aesthetic experience, and showing "Tasks of Aesthetic Life". Tasks of aesthetic life indicate the final goal of arts education in two main categories: performing/making one's life with aesthetic value such as problem-solving via arts capabilities and responding to one's worldview based on the concept and idea of arts. To reach the curriculum goal, a learner has to come through two different sorts of learning in the arts: one is to undergo the artistic process with knowledge and skills, and the other is to integrate the aesthetic experience into life. These experiences result in a demonstration of problem-solving as the outcome of the curriculum.

If we draw a line from left to right across the "integrative learning experience" to divide this model into two parts, the bottom part focuses mainly on learning within the curriculum content. The bottom part stands for the traditional curriculum approach which is neither excluded from the CDAE model nor the content and/or purpose of the CDE approach. Relatively, the upper part shows an ideal result of CDAE that the basic competency of arts has to grow out from the integrated skills, abilities, and knowledge into the circumstance of the real world.

The curriculum of CDAE has four categories in the model: facts/works of art in the real world, knowledge/skills of the art world, concepts/theory of arts such as attitude on aesthetic experience, and performing/task in an authentic situation of life. These categories represent performing (music, dance, and drama)/producing (visual arts), and responding to arts. The learning flow embraces possibilities for curriculum development in many ways, and the learning process from the bottom to the top also reflects the course of arts education. Based on the idea of lifelong learning and integrated decision-making within the circumstances of real life via arts competency, a unique curriculum model must be taken into account for arts education. However, arts education cannot exclude itself from the national curriculum structures. This consideration meets the requirement of interdisciplinary in Taiwan as well as concerns the difficulties of fitting in any existing curriculum model from other countries.

5. Approaches of CDAE Model

There are lessons learned from the literature review. First of all, CDE stems from the current education movement of CBL which is built on subject ability and knowledge as its cornerstone. A teacher must experience artistic/aesthetic competency development to guide students to experience artistic/aesthetic competency. Only a confident arts teacher with domain competency rather than ability and knowledge of the art world demonstrates the potential to teach successfully. Second, the CDAE curriculum means more than teaching knowledge and skills for acceptable learning achievement. Arts teachers have to turn their eyes away from what must be learned and measured required by ADCG to what and how learners encounter and apply acquired from art classes to their lives. Art educators know nothing about student's life in the future, thus delivering the experience and understanding of how arts serve our life. This learning claims that experiencing arts competencies through the process of curriculum practice is the core of art education.

Characteristics of CDE bring up the new value proposition. The CDE model aligns every student's incentive, and the effectiveness of teachers is evaluated by students' progress in learning but not by seat time (Lurie, Mason, and Parsons, 2019; Sturgis, Patrick, and Pittenger, 2011). Moving forward to CDE from traditional education, we expect the current system to change in a form of "self-cannibalization". We still can create enough models of customized learning for students and make CBL a conclusion (Sturgis, Patrick, and Pittenger, 2011). Customized learning is an important feature of CDE and is highlighted in curriculum guidelines in Taiwan. Adopting the feature of customized learning, the CDAE curriculum model develops its spectacular curriculum in the Arts Domain which focuses on aesthetic experience and taste in one's life.

In the CDAE curriculum model, the curriculum must include artworks in daily life, knowledge/skills and concepts/theory of arts, and performing tasks in real life (Voorhees, 2001). Implementing CDE in the Arts Domain is a new idea for teachers in Taiwan. The focus of teaching is no longer presenting materials but providing aesthetic experiences and performing tasks related to arts in life, and the learning outcomes are assessed from product to process in the Arts Domain. In other words, arts assessment in CDAE pays attention to formative concerns rather than contents and performance standards.

Finally, Arts teachers in the CDE classroom are not instructors who deliver arts concepts and knowledge through materials but learn arts with students to experience and perform arts competencies. Stated differently, an art teacher is not a specialist in front of learners, but a practitioner fulfilled with aesthetic experiences. A CDE art teacher must weigh a learning process more than outcomes thus the allocation of learning activities surpasses the completion of learning content. While CDE asserts learners must solve problems in real life, ADCG aims to lead students to find the impacts of arts in their daily life, furthermore, to make artistic decisions in either arts or other life circumstances.

6. From Defining to Developing a CDAE Curriculum Model

While we take OECD's suggestion of education for the future into account and transform from CBE around 2008, a new era of educational reform presents as CDE. There are two main facets of the CDE curriculum: a) education aims to face future life, and b) curriculum focuses neither on knowledge, skill, or attitude, but on the process of how to make decisions appropriately and aesthetically from the viewpoint of aesthetic education. We define competency in a CDAE model as "knowledge of art and "ability" to make and respond to arts with aesthetic attitudes and artistic or aesthetic value judgment. The judgment feature perfectly falls in the CDAE model as generating/problem-solving while the other two are expressing/realizing and responding/appreciating as defined in Fig. 8. Multiplication in defining functions as cognition reconstruction represents high-order thinking, critical thinking, decision-making, integration, and so on. The curriculum model maps the definition that operates in an authentic situation. An adequately practical curriculum model offers CDE to arts and connects the classroom to an artistic fulfilled life in the real world. For implementing the CDAE curriculum, teachers can pay attention to competency outcomes as performance indicators in curriculum guidelines. Thus, what we need to focus on is the sound needs of society for competencies to be demonstrated (Fig. 1).

In constructing a CDAE curriculum model, art teachers must be innovative to create models or approaches as CDE. Facing AD CG of Twelve-year Basic Education, many teachers do not know which course to follow. On the contrary, several teachers think the guideline gives flexibility for teaching and learning. However, we are optimistic about the future of the CDAE and believe art teachers will be creative to guide learners to bring art to their lives and become lifelong learners. To have a determination or present an appropriate aesthetic taste for individuals and society, the ultimate goal of school arts education must be set up.

The curriculum model shows how art educators are considering an appropriate pathway to develop a curriculum undertaking the essence of the CDE model which explains a crystal view of new art education. It shows that transforming curriculum guidelines into art classrooms and teaching students to recognize the experience of aesthetic performance is indeed a matter of thinking and reflecting. Moreover, the art curriculum model in responding to aesthetic competency needs to be reviewed and examined to reflect the aesthetic experience and tasks of making decisions.

Author Contributions: Conceptualization, Cheng, M. H. and Chen, J. H. S.; methodology, Cheng, M. H., Chen, J. H. S., and Li, C. C.; software, Li, C. C.; validation, Cheng, M. H. and Chen, J. H. S.; resources, Cheng, M. H., Chen, J. H. S., and Li, C. C.; writing—original draft preparation, Cheng, M. H.; writing—review and editing, Chen, J. H. S.; visualization, Cheng, M. H. and Li, C. C.; supervision, Chen, J. H. S.; All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Barone, T., & Eisner, E. (1997). Arts-based education research. In *Complementary Methods for Research in Education*, 2nd ed.; Jaeger, R.M., Ed.; Washington, DC: American Educational Research Association, pp. 95–109.
2. Black, M.G. (2000). *Teaching for the Aesthetic Experience: A Dissertation*; Cambridge, MA: Lesley University.
3. Brown, M. (1994). An Introduction to the Discourse on Competency-based Training (CBT). In *A Collection of Readings Related to Competency-based Training*; Victoria, Australia: Victorian Education Foundation, Deakin University, pp. 1–17. Retrieved from <http://files.eric.ed.gov/fulltext/ED384695.pdf>.
4. Bryce, J., & Harvey-Beavis, A. (1997). Competencies and arts education in Australia. In Proceedings of the British Educational Research Association Annual Conference, University of York, Heslington, UK, September 11-17, 1997. Retrieved from <http://www.leeds.ac.uk/educol/documents/000000359.htm> (Accessed on September 26, 2019).
5. Chen, Y.-H. (2018). Discussion from a competence-oriented perspective on the status quo and practice of the secondary school teacher training "arts teaching material and methods" curriculum. *Journal of Research in Education Sciences*, 63(4), 89–117.
6. College Board. (2013). *2013 College-bound Seniors: Total Group Profile Report*. Analysis by Americans for the Arts. Retrieved from <https://secure-media.collegeboard.org/digitalServices/pdf/research/2013/TotalGroup-2013.pdf>
7. Coutts, G., & Eça, T.T., Eds. (2019). *Learning Through Art: Lessons for the 21st Century?* Viseu, Portugal: Quinta da Cruz, Estrada de São Salvador.
8. Deng, T.-S. (2014). Art-based in competence education practice. *Journal of Arts Research*, 10, 159–186.
9. Eisner, E.W. (1992). Curriculum ideologies. In *Handbook of Research on Curriculum: A Project of the American Educational Research Association*; Jackson, P.W., Ed.; New York, NY: Macmillan Pub. Co., pp. 302–326.

10. Evans, C.M., Graham, S.E., & Lefebvre, M.L. (2019). Exploring K-12 competency-based education implementation in the northeast states. *NASSP Bulletin*, 103(4), 300–329.
11. Fan, H.-H. (2016). Core competencies and directions governing for the 12-year basic education curriculum: Introduction “National core competencies: DNA of 12-year national education curriculum reform.” *Pulse of Education*, 5, 1–6.
12. Ford, K. (2014). Competency-Based Education: History, Opportunities, and Challenges. *UMUC Center for Innovation in Learning and Student Success*, 10, 1–21. <https://doi.org/10.13140/RG.2.1.4679.0885>
13. Gruppen, L., Mangrulkar, R., & Kolars, J. (2012). Competency-based education in the health professions: Implications for improving global health. *Human Resources for Health*, 10, 43–49. <https://doi.org/10.1186/1478-4491-10-43>
14. Haanstra, F. (2013). *Research into Competency Models in Arts Education*; Bonn, Germany: International Perspectives of Research in Arts Education.
15. Hong, Y.-H. (2008). ‘The definition and selection of competencies theories and framework’ (PPT). Retrieved from <http://hss.edu.tw/HssWeb/wSite/public/Attachment/fl350093070195.pdf>.
16. Hsu, C.-H. (2019). 12-year basic education curriculum core competency-drive teaching strategy concept, design practice and thinking. *Taiwan Educational Review Monthly*, 8(10), 13–18.
17. Huang, H.-P. (2017). Discussion about the concept of key competencies and evaluation. *Taiwan Educational Review Monthly*, 6(3), 91–94.
18. Jones, E.A., & Voorhees, R.A. (2002). Defining and assessing learning: Exploring competency-based initiatives. Report of the National Postsecondary Education Cooperative Working Group on Competency-Based Initiatives in Postsecondary Education. Brochure and Report. Jessup, MD: NPEC.
19. Joyce, B.R. (1971). The promise of performance. (Competency)-based education: An analytical review of literature and experience. Final Report. SPON; BBB08936. New York, NY: Columbia University, Teachers College.
20. Lurie, H., Mason, J., & Parsons, K. (2019). State of the field: Findings from the 2018 national survey of postsecondary competency-based education (NSPCBE). Retrieved from <https://www.air.org/project/national-survey-postsecondary-competency-based-education> (Accessed on June 29, 2020).
21. Marwick, A. (2001). *The New Nature of History: Knowledge, Evidence, Language*; London, UK: Palgrave.
22. McCulloch, G. (2004). *Documentary Research in Education, History, and Social Sciences*; London, UK: Routledge Falmer.
23. Ministry of Education. (2018). *Curriculum Guidelines of 12-year Basic Education: Arts Domain*; Taipei, Taiwan: Ministry of Education.
24. Ministry of Education. (2014). *Curriculum Guidelines of 12-year Basic Education: General Guidelines*; Taipei, Taiwan: Ministry of Education.
25. Ministry of Education. (2018). *Curriculum Guidelines of 12-year Basic Education: Curriculum Guideline of Arts Domain*; Taipei, Taiwan: Ministry of Education.
26. National Coalition for Core Arts Standards. (2014). America's National Core Arts Standards. Retrieved from <https://www.nationalartsstandards.org>.
27. Nodine, T.R. (2016). How did we get here? A brief history of competency-based higher education in the United States. *The Journal of Competency-Based Education*, 1(1), 5–11.
28. OECD. (2021). OECD future of education and skills 2030: The OECD learning compass 2030. Available online: <https://www.oecd.org/education/2030-project/teaching-and-learning/learning/> (Accessed on August 21, 2021).
29. Ohio State Department of Education. (1996). *Comprehensive arts education. Ohio's Model Competency-based Program*; Columbus, OH: Ohio State Department of Education.
30. Palardy, J.M., & James, E.E. (1972). Competency based education. *The Clearing House*, 46(9), 545–548.
31. Schalock, H.D., Spady, W.G., & Hathaway, W.E. (1976). Alternative models of competency based education. Working Draft. Salem, OR: Oregon Competency Based Education Program.
32. Scott, B. (1982). Competency based learning: A literature review. *International Journal of Nursing Studies*, 19(3), 119–124. [https://doi.org/10.1016/0020-7489\(82\)90030-X](https://doi.org/10.1016/0020-7489(82)90030-X)
33. Smith, R.A. (1989). *The Sense of Art: A Study in Aesthetic Education*; London, UK: Routledge.
34. Spady, W.G. (1977). Competency based education: A bandwagon in search of a definition. *Educational Researcher*, 6(1), 9–14. <https://doi.org/10.2307/1175451>
35. Sturgis, C., Patrick, S., & Pittenger, L. (2011). *It's Not a Matter of Time: Highlights from the 2011 Competency-based Learning Summit*; Vienna, VA: International Association for K-12 Online Learning.
36. Tsai, C.-T., Chen, P.-C., Chen, Y.-H., Lin, Y.-F., Fang, V., & Gau, S.-J. (2014). The guidelines for the development of 12-year national basic education curriculum. Retrieved from <https://ws.moe.edu.tw/001/Upload/23/relfile/8006/51083/c1f743ce-c5e2-43c6-8279-9cc1ae8b1352.pdf>.

37. Tsai, C.-T. (2011a). The difference between “competence” and “literacy” in curriculum reform. *Journal of Education Research*, 203, 84–96.
38. Tsai, C.-T. (2011b). The architectural connotation of key competencies in curriculum reform. *Journal of Education Research*, 209, 118–129.
39. Tsai, C.-T. (2014). Analysis of theoretical foundation and research result of international organization regarding national core competencies. *Journal of Education Research*, 238, 106–120.
40. Tsai, C.-T. (2016). Recent research and curriculum design of national core competencies in 1-12 national basic education curriculum reform in Taiwan. *Journal of Educational and Multicultural Research*, 13, 223–246.
41. Uhrmacher, P.B. (2009). Toward a theory of aesthetic learning experiences. *Curriculum Inquiry*, 39(5), 613–636.
42. United Daily News. (2020). A report from the annual survey of curriculum guidelines implementation. Retrieved from <https://udn.com/newmedia/2020/12-years-education/poll/> (Accessed on Aug 20, 2020).
43. U. S. Department of Education, National Center for Education Statistics. (2001). Defining and assessing learning: Exploring competency-based initiatives (by E. Jones, R. A. Voorhees, and K. Paulson for the Council of the National Postsecondary Education Cooperative Competency-Based Initiatives Working Group). Department of Education, National Center for Education Statistics.
44. Voorhees, R.A. (2001). Competency-based learning models: A necessary future. *New Directions for Institutional Research*, 2001(110), 5–13. <https://doi.org/10.1002/ir.7>
45. Wilson, M., & Ruiten, S.V., Eds. (2019). *Share Handbook for Artistic Research Education*. Amsterdam, Holland: European League of Institute of the Arts.
46. Wu, C.T., & Tsai, Y.-T. (2017). From competency-based to standardbased teacher education. *Journal of Education Research*, 273, 48–66.
47. Wu, C.-S. (2017). Competency-based teacher education: Ideas, challenges and practices. *School Administration*, 112, 14–27.
48. Wu, P.-C., & Chan, J.C. (2018). Reflecting on the perspective transformation of competency-based education, *Journal of Educational Research and Development*, 14(2), 35–64.

Publisher’s Note: IJKII remains neutral with regard to claims in published maps and institutional affiliations.

Copyright: © 2022 The Author(s). Published with license by IJKII, Singapore. This is an Open Access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/) (CC BY), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.