

Initiated by:



Supported by:



Realizing The Impossible





THE COLLABORATIVE INSTRUCTIONAL DESIGN SYSTEM (CIDS)

Transforming teachers, inspiring learners

A new dimension of engaging teachers collaboratively involved in the instructional design professionally and systematically for the current 21st-century learning and future educational needs.

4th Edition

Ismail Md. Zain, Ph.D. © **Dynamic Global Vision:** Ipoh, Perak, Malaysia. 2023 "The Four-Dimensional Education has been selected as the 21st-Century Learning framework in the Collaborative Instructional Design System (CIDS). It guides user in the instructional planning process: redesigning, reconstructing, and reengineering academic directions, visualizing the current educational landscape towards preparing learners' future career paths that are relevant to the Fourth Industrial Revolution."

 Charles Fadel – Global Education Thought Leader, Author, Futurist, Inventor, Founder & Chairman, Center for Curriculum Redesign, USA Project Director at Harvard Graduate School of Education, USA



Charles Fadel

REFLECTIONS

The government has formulated a transformation of education policy & philosophy for the country to fulfill the current 21st century learning needs but.....

Do we teachers design our instructions following the needs and aspirations?

Teachers are enriched with pedagogical knowledge, skills & technology in their pre-service & in-service courses but.....

Do we teachers apply & integrate into our instructional planning?

CIDS - "Collaborative Instructional Design System" transforming teachers....inspiring learners...

THE COLLABORATIVE INSTRUCTIONAL DESIGN SYSTEM (CIDS)

A. PREFACE

The transformation of the education ecosystem is critically required, particularly in the era of information technology, as well as preparing students for the VUCA (*volatility, uncertainty, complexity, and ambiguity*) world. The main aim is to enhance the quality of educational practices whilst creating an inspiring learning environment for learners, allowing them to determine their learning activities as far as the learner-centered approach is in practice.

Much effort has been spent on providing e-learning applications to the learners, tools, and strategies for teachers. However, not much effort has been made in connecting the dots - integrating elements and requirements of the current educational needs, fulfilling the nation's educational policies and aspirations into a mechanism that helps teachers to have a wider perspective on the process of designing the instructions professionally, systematically and creatively.

The development of Collaborative Instructional Design System (CIDS) serves dual functions -(i) a transformation of the ID model that contributes to the 21st Century classroom-based ID Model (ii) a mechanism/platform for on-line instructional planning in fulfilling the current educational needs, particularly the 21st Century education developing "globally competitive learners", and learning opportunities regardless of their abilities.

CIDS comprises of three instructional planning programs. (i) The Integral ASIE Instructional Design Model (Ismail Md. Zain, Balakrishnan M. 2014, 2016), who guides teachers in instructional planning with pedagogical approaches. It provides practitioners a valuable tool and perspective in enhancing the quality of instruction, supports experiential and collaborative learning in gaining and creating new ideas, skills, and knowledge for the learners both in the classroom and online. Thus, establishing a more participative, communicative and innovative learning environment. Its IHE features (integrative, hybrid, eclectic) can collaborate with many elements in producing highly-rich, effective and creative instructional planning activities. (ii) Lesson Study – sharing and analyzing instructional plans collaboratively for improvements. (iii) LCRI - Learners' Competency-Requirements – evaluating of the infusion of 4 dimensional-education elements in teachers' instructional plans).

Aspects of the model are based on the proposed 21st-Century Learning Framework of Four-Dimensional Education (Fadel., Bialik. M., Trilling, B. Centre for Curriculum Redesign, 2015. 2019 - <u>https://curriculumredesign.org/</u>), - The four dimensions (*knowledge, skills, character and meta-learning*) are relevant in the current 21st Century teaching and learning process.

The model has fundamentally encompassed the philosophical attributes of metaphysics, epistemology, axiology, ethics, and logic. These philosophical underpinnings strengthen the need for professional education players, primarily classroom teachers, to execute this model in their daily teaching and learning endeavors.

It is a classroom-based ID model that follows the theories of behaviorism, cognitivism, constructivism (Jonassen, 1991), and connectivism (Siemens, 2005; Ireland, 2007).

In early 2020, an outbreak of the Covic-19 pandemic resulted in a global change in the education landscape. Home-based or digital learning has become an important means of delivering lessons despite an issue of poor connectivity faced by certain countries and the unpreparedness of those who are involved in the learning-teaching processes. This is a big challenge for the whole world. Besides, various learning approaches have been introduced for a student to pursue their studies CIDS with new features make possible for students to register and participate in CIDS-VideoCorps (communication channel for virtual meet) as an option and value-added in an e-learning environment. CIDS is accessible at https://asiemodel.com

B. INTRODUCTION TO THE COLLABORATIVE INSTRUCTIONAL DESIGN SYSTEM (CIDS) - Connecting the Dots



Exhibit 1: The Introduction Page of CIDS (<u>https://asiemodel.com</u>)

- (i) Framework & Concept
 - CIDS is a system that provides teachers with the option to plan & manage the learning and teaching process (including other planning, such as Lesson Study and, LCRI Competency-Requirements)
 - It helps teachers to have a wider perspective on the process of designing the instructions creatively, systematically, and professionally in the current teaching and learning environment, in connecting the dots integrating elements and requirements of the current educational needs, fulfilling the nation's educational policies and aspirations through its integral features.
 - The process of **planning and managing learning and teaching** is implemented following the **theories and principles of instructional design** a branch of discipline in the field of education technology that has long existed.
 - Thus, the **Integral ASIE Instructional Design Model** was created by CIDS **to meet the needs of 21st Century Education** - to transform the field of instructional design in line with the **needs of education today.** Besides, it becomes an **added value** to the **knowledge and skills** of teachers in the field of **instructional design** for **classroom best practices.**

- It is a simple and practical planning tool that fulfills the features of current and future educational needs. It allows teachers to strategize approaches, methods, and activities for learners to determine their own choices that will motivate them to engage in inspiring learning activities.
- The elements in *Four-Dimensional Education* (*Center for Curriculum Redesign-CCR, 2015, 2019, US*) have been the **main reference** for adaptation in the Integral ASIE Instructional Design Model.
- The uniqueness of the innovation of this model is that it has a **dual function**-(i) as a **classroom-based 21st century instructional design model** (ii) as well as a **classroom-based 21st century online instructional design model** that simplifies and **allows teachers to design the instruction** (*teacher lesson plans*) directly on the model by following the flow of **planning procedures** found on its **components, aspects,** and **items**.
- The planning can be **shared**, **monitored**, **guided**, **and evaluated individually** or in **bulk** by various parties at various levels.

(ii) Terminology

- **Collaborative Instructional Design System** (CIDS) an application system for instructional design (including lesson study & covering various dimensions of instructional planning for teachers, administrators, and learning strategies for students, to meet the educational needs of local and global levels.
- An Integral ASIE Instructional Design Model Instructional Design Tool (*based on the principles & theory of instructional design*) that provides a flow of professional & systematic instructional planning procedures. ASIE is an acronyme for:
 - A = Analyze
 - S = Strategize
 - I = Implement
 - **E** = **E**valuate
- **Components** Four (4) components that have several dimensions in the ASIE Model for the instructional planning process.
- **Dimension**-aspects of planning found in each component of the model are adapted from the Four Dimensional Education Learning Framework (*Center for Curriculum Redesign*, 2015, 2019). They are competencies and sub-competencies of 21st century

learning required by learners to be infused in teachers instructional planning activities (IPA).

- Items several planned items in each aspect that can be customized by the user.
- **YIP** Yearly Lesson Plan consists of several weekly instruction plans.
- **MIW** Multiple Integration Worksheet is weekly planning information displayed from items selected by users in the model that indirectly generates YIPs automatically. Users may select items from it to create several IPAs for the week.
- **IPA** Instructional Planning Activities is a daily lesson plan or any term used to describe teachers' preparation for classroom planning activities– derived from selected items of MIW.
- Instructional Events Steps for T&L activities in IPA
- **Record** refers to a complete set of teacher lesson plans (MIW & IPAs) created.
- **Insert Comment** Comments/guidance made by evaluators on teacher's learning activities for improvement purposes.
- Shared Record complete records submitted for sharing by other users.
- **Supervisory Records** a list of teacher planning records under the supervision of an administrator.
- Links to Share Resources refers to the process of uploading video clips, images, and information from the internet or materials from local folders to be uploaded to CIDS for sharing.
- Links to Teaching Evidence Sources refers to the process of uploading materials from various sources as evidence of teaching activities carried out by teachers *(examples: pictures of fieldwork, reports, student activities, etc.)*
- **Teaching Timetable** A schedule of teaching time created by a teacher for the system, especially on the setting of date and time of the IPAs.
- **Modular learning** The combination of subjects/topics in the same class level or at the different class level.
- **CIDS-VideoCorps** A virtual communication feature for CIDS users and guests.

C. THE INTEGRAL ASIE INSTRUCTIONAL DESIGN MODEL

(i) Introduction

- The Integral ASIE Instructional Design Model is the instructional design model that has been transformed to meet the current learning environment. This model provides the procedural flow of the instructional planning which is flexible (*with customizable planning items*), constructive, and user-friendly.
- It provides an option for practitioners in the field of education as a valuable tool or mechanism in planning the lesson creatively, following the needs of learners based on their characteristics or attributes.
- Learners are also given an equal opportunity to determine a variety of methods, activities, and recommendations proposed to be experienced in inspiring and exciting learning and facilitating environments. This model has a broad perspective towards improving the quality of learning, facilitating and training activities.
- It has a high impact on teachers and learners in the learning process through the options available in providing opportunities for them to discuss and share materials, experiences, and creativity with other colleagues throughout the country towards creating a high-tech learning approach fulfilling the requirements of the current education landscape.



Exhibit 2: The Integral ASIE Instructional Design Model Version 9.5

(ii) Theoretical And Conceptual Framework Of The Collaborative Instructional Design System

The Integral ASIE ID Model has fundamentally encompassed the philosophical attributes of metaphysics, epistemology, axiology, ethics, and logic. This can be seen in flexible planning items that rely heavily on the creativity of teachers and students.

Exhibit 3: The Philosophical attributes of The Integral ASIE ID Model

Philosophical attributes	Definition
metaphysics	The branch of philosophy deals with the first principles of things, including abstract concepts such as being, knowing, identity, time, and space.
epistemology	The theory of knowledge concerning its methods, validity, and scope, and the distinction between justified belief and opinion.
axiology	The study of the nature of value and valuation, and of the kinds of things that are valuable.
ethics	Moral principles that govern a person's behavior or the conducting of an activity.
logic	The reasoning is conducted or assessed according to strict principles of validity.

These philosophical underpinnings strengthen the need for professional education players, primarily classroom teachers, to execute this model in their daily teaching and learning endeavors. It can be seen from various perspectives, concepts, and theories in the following descriptions.

- Theoretically, by looking at various perspectives, CIDS, as its name applied, can collaborate with many elements in the instructional planning. The Integral ASIE Instructional Design Model encompassed in CIDS has the features of IHE (*integrative*, *hybrid*, *eclectic*).
- The items contained in this model are integral because they are integrated with the various basic elements in education, which include the science of technology, pedagogy, and content knowledge TPACK (Mishra, P., & Koehler, MJ (2006) comprehensively to meet the current learning needs. It involves various communities that contribute to the development of learners' knowledge, skills, and character.
- Likewise, the key elements in the current learning framework of **Four-Dimensional Education** (2015, 2019) are adapted to be part of the planning items in this model to ensure it's relevant to current learning situations.

Characteristic of The Integral ASIE ID Model	Description
Integral	 Integrates various basic elements in the knowledge of education, namely technological knowledge, pedagogical and content knowledge (TPACK) Integrates all dimensions of Four-Dimensional Education, CCR 2015, 2019 – the 21st Century learning needs It involves various communities that contribute towards the development of learners' knowledge, skills, and character.
Hybrid	 It is a classroom-based instructional design model. It has a wider scope that goes far beyond the four walls involving the virtual environment learning (home-based learning), gives room to the blended type of learning as well as to make the possibility of the flipped classroom being practiced.
Eclectic	 Incorporates ideas from various learning theories. Aim at building a more effective learning experience than just focusing on one theoretical influence.

Exhibit 4: Characteristic of The Integral ASIE ID Model

- Looking at the features on the components and items of the model, it can also be classified into the hybrid instructional design system category. Although basically, it is a classroom-based ID model, it has a wider scope that goes far beyond the four walls involving virtual environments learning which give room to the blended type of learning as well as to make the possibility of a flipped classroom being practiced.
- It follows an eclectic approach to instructional design whereby a designer (*user*) blends ideas from multiple learning theories to construct a learning experience that works better than from only one theoretical influence. Hence, the paradigms of behaviorism, cognitivism, constructivism, and connectivism are likely being considered and applied in the various instructional planning procedures, unlike some of the conventional models that were initially designed for Instructional System Development (ISD) (Seel, N. M. 1997, Gustafson K.L., Branch R.M. 2002) which make this model differs from other conventional ID models.
- Theories of behaviorism, cognitivism, constructivism are the three broad learning theories most often utilized in the creation of instructional environments. These theories, however, were developed in a time when technology did not impact learning. Over the last twenty years, technology has reorganized how we live, how we communicate, and how we learn.

Learning needs and theories that describe learning principles and processes should be reflective of the underlying social environment. Vaill (1996) emphasizes that "learning must be a way of being – an ongoing set of attitudes and actions by individuals and groups that they employ to try to keep abreast of the surprising, novel, messy, obtrusive, recurring events" (p.42).

- New technology forces the 21st-century learner to process and apply information in a very different way and at a very different pace from any other time in history, thus, leading to the emergence of connectivism.
- According to Siemens, (2005) connectivism was driven by the understanding that decisions were based on rapidly altering foundations. New information is continually acquired, and the ability to draw distinctions between important and unimportant information is vital.
- In 1932, Bartlett pioneered what became the constructivist approach (Good & Brophy, 1990). Constructivists believe that learners construct their reality or at least interpret it based upon their perceptions of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in the perception of the physical and social experiences which are comprehended by the mind (Jonassen, 1991).

An Eclectic Approach to Theory in Instructional Design (Collaborative Instructional Design System – ASIE Model)							
LEARNING THEORIES	Behaviorism	Cognitivism	Constructivism	Connectivism			
INSTRUCTIONAL DESIGN PROCEDURES	Elements of 21 st - century learning in the instructional planning procedures will create awareness, which is a great contribution towards the character building of the learners. Example: Life and career skills, the theme of 21 st -century learning.	The approaches towards the learning methods will generate the thinking skills of the learners.	The 4Cs skills will help learners to construct, collaborate, share, and generate ideas in the learning process.	Blended learning and flipped classroom practices will produce highly independent learners. While ICT literacy allows an unlimited amount of information access, that shaped them to become globally competitive learners.			

Exhibit 5: An Eclectic Approach to Theory in Instructional Design

- As a result of the above theories, various learning and teaching models have been developed which introduce different methods and techniques to be applied by teachers and students in learning situations. These methods and techniques can be integrated into teacher's planning procedures according to their creativity in the Integral ASIE ID Model.
- While adapting to the basic principles of instructional design and other instructional design models such as the Dick & Reiser Model, Dick & Carey Model, ASSURE Model, ARCS Model, ADDIE Model, attention was also given to other related fields in the formation of this ID model.
- Basically, what distinguishes between The Integral ASIE ID Model and conventional ID models is the goal towards meeting the concept of the learner-centered approach. Most other models carry the question "What elements need to be determined by the teacher to build a learning situation for learners" it is more teacher-centered because teachers determine the planning process.
- While The Integral ASIE ID Model asks the question "How teachers strategize the learning *(with suggested learning items listed)* in developing a flexible learning situation to meet the needs of the learners" it is more learner-centered learning because teachers only suggest various elements that are appropriate while learners are allowed to implement those activities that inspire their interest in fulfilling the current educational situation. It is more about the collaborative work between teacher-student, student-student.
- As an example of a strategy proposed by the teacher for the problem-solving session, a group of learners may choose a mind map for discussion/presentation, while another group of learners may be interested in finding the appropriate video clip for discussion/presentation.
- In this situation, special attention should be given to learners' profiles, their readiness in following the lesson, media attributes, and learners' thinking levels in establishing the differentiated learning situation. Moreover, the relevance between the principles and theories taught in the classroom to the working environment to be met in the era of the Revolutionary Industry 4.0 (IR4.0) and their position and role in the emergence of the smart society 5.0 (Society 5.0) in the future is a vital factor to be analyzed, strategized and implemented.
- These factors are important in creating the concept of *"thinking out of the box"* among learners and educationalists, as well as in addressing the current educational developments.

(iii) Comparison of Instructional Design Models

Instructional Design Models are characterized by their relevancy in designing a particular field/condition. Although the components may look alike in general (*Example: Analyze, Develop, Design, etc.*), but it has to be carefully adapted to meet the requirements of a particular designing field. It can be summarized as follows:

Exhibit 6:	Comparison	between	conventional	and	situational	ASIE ID	Model
------------	------------	---------	--------------	-----	-------------	---------	-------

CONVENTIONAL ID MODELS	SITUATIONAL ASIE ID MODEL
 Most of the models were originally designed for Instructional System Development (ISD). (http://www.nwlink.com/~donclark/history_isd/ad die.html) Some of the conventional ID models created based on the specific needs, conditions, and theoretical aspect; Example: ADDIE model - focus on the creating of the software product, ASSURE Model - focus on media selection in learning. The ARCS model - focuses on motivational elements in instructional planning. Dick & Reiser model - focuses on general classroom practices. 	 It is purely designed for classroom orientation, regardless of the mode of learning (traditional, online, home-based, blended learning, flipped classroom, etc.). The 21st Century Learning Framework from the Four-Dimensional Education (CCR, 2015, 2019) has been adapted into the procedural flow of The ASIE ID Model. They are competencies and sub-competencies of 21st century learning required by learners to be infused into teachers' instructional planning activities (IPA). Since Competencies & Sub-competencies required for different disiplines have been released by CCR through their research, CIDS used the AI element to match it automatically in the system for users' convenience. The model provides a flexible planning item that could be easily customized accordingly to the needs of the teachers' planning practices. Bridging between theoretical framework and best classroom practices.

•	Many lesson plans use templates to design a course or lesson. Some applications provide space for sharing a variety of teaching lesson resources. Example Edmodo. There is a model for specific areas. Exp. The SAMR Model is to assist instructors in determining the level of technology integration in the learning environment. The goal is to introduce technological tools that redefine the learning space, which is ultimately accomplished by replacing traditional teaching methods with alternate learning environments.	•	Teachers may collaboratively be involved in planning their instruction virtually or sharing instructional planning with others. It is integral that teachers and students have the freedom to choose the mode of learning (<i>digital or non-digital</i>) in the course of their learning session. They may refer to other ID Models to support the strategies developed. ASIE model does not focus on a certain approach. It is more about instructional planning for learners with flexible planning items. Teachers have the autonomy to adopt a variety of approaches to inspire learners that are relevant to the current learning environment.
•	More concern about teachers' delivering in designing instruction – teacher-centered. Instructional planning is more structured, a stereotype with rigid planning items.	•	More concern about learners' aspirations, emphasizing the learning strategies, fulfilling learners' learning requirements (<i>learner-centered</i>) in designing instruction. Flexible design items – allows customization with regards to the current situation (<i>able to add and remove items in</i> <i>the online version</i>).
•	Normally, except in certain circumstances, learners <u>follow</u> teachers' instructional process with less freedom in selecting and creating their activities.	•	Learners have freedom in choosing their activities based on their profiles, creating an interesting, exciting, motivating, inspiring, and innovative learning environment.
•	Answering the question "What type of instructional planning should be prepared and delivered to learners? – <i>(teachers' centered)</i>	•	Answering the question "How to strategize the instruction according to learners' needs" (gaining, receiving, responding, transferring, creating, innovating new skills and knowledge?" promotes learners' engagement/interactions - collaborating, sharing, communicating, critical and creative thinking)
•	Application towards system development, courseware development, selection of teaching materials, and the development of teaching methods.	•	The optional and advanced features of the application provide wider input from various sources' including the professional learning community created towards accommodating, integrating, applying (<i>strategizing</i>) current educational needs, preparing learners for the current and future educational environment.

•	A certain classroom-based model provides components for the general planning process.	•	The components of the model provide teachers with guidelines to plan their instruction at the macro-level (<i>topical/weekly/monthly lesson planning</i>) and the micro level (<i>daily lesson plan</i>)
•	Learners are not involved in the ID model.	•	Learners are given opportunities to determine their strategies (<i>methods</i> , <i>technique</i> , <i>activities</i>) that inspire them in the learning activities. Learners are able to participate in the CIDS-VideoCorps – communication channel for vitual meeting.
٠	Planning is done conventionally – manually designed.	•	Online planning – the model's advanced features provide opportunities, enabling instructors/teachers/educationists to share ideas in their planning across nations with other communities.

D. THE 21STCENTURY EDUCATION

So much attention has been given to the characteristics and features of the 21st Century Learning framework in the development of the Integral ASIE ID Model

- Initially, The framework for the 21st Century Learning (2002,), which describes the skills that learners need to thrive in today's global economy, has been proposed by The Partnership for The 21st Century Skills (www.21stcenturyskills.com).
- P21's **Framework for 21st Century Learning** was developed with input from teachers, education experts, and business leaders to define and illustrate the skills and knowledge students need to succeed in work, life, and citizenship, as well as the support systems necessary for 21st-century learning outcomes. It has been used by thousands of educators and hundreds of schools in the U.S. and abroad to put 21st-century skills at the center of learning. (http://www.p21.org/our-work/p21-framework).
- In 2015, **The Four-Dimensional Education** (*Centre for Curriculum Redesign, 2015, 2019*) has been released to give a wider perspective on the framework of 21st century learning.

(i) The Four - Dimensional Education

The Four-Dimensional Education (Centre for Curriculum Redesign, 2015, 2019) (Exhibit 7) focuses on the transformation of our education systems in relation to the competencies and aspirations needed by our learners in the 21st-century learning environment. The

component has been restructured to portray the qualities of human learning dimensions, namely the knowledge, skills, character, and meta-learning that involve the metacognition processes.



Exhibit 7: The Four-Dimensional Education (*Centre for Curriculum Redesigning*, 2015)

CIDS integrates the framework of The Four Dimensional Learning in the instructional design items to guide the user in the instructional planning: redesigning, reconstructing and reengineering academic directions, visualizing the current educational landscape towards preparing learners' future career path that is relevant to the Fourth Industrial Revolution.

The four dimensions and their compentencies are integrated into CIDS as follows:

Dimension 1: Integrating – Knowledge (*what we know & understand*)

• *Themes – Essential Content*: Disciplines, Branches, Subjects, Topics *Core Concepts* (*including processes*)

Dimension 2: Developing – Skills (how we use what we know)

- Creativity
- Critical Thinking
- Communication
- Collaboration

Dimension 3: Building – Character (how we behave and engage in the world)

- Mindfulness
- Curiosity
- Courage
- Resilience
- Ethics
- Leadership

Dimension 4: Instilling - Meta-Learning (how we reflect & adapt)

- Metacognition
- Growth Mindset

Please refer to the website for more information on *The Four-Dimensional Education*.

Exhibit 8: The Integration of 4D-Edu in the Model



The above figure illustrates the integration of 4 Dimensions in the Integral ASIE Instructional Design Model.

E. THE INTEGRAL ASIE INSTRUCTIONAL DESIGN MODEL FEATURES

(i) The main component of The Integral ASIE ID Model

- Composed of 4 components (following the instructional design theories & principles)
- The 4DEdu elements are adapted into the integral ASIE ID Model as integrated pedagogical planning elements that guide teachers to design their instructional flows (*creation of lesson plans*) professionally & systematically.

Exhibit 9: The Integral ASIE Instructional Design Model



• Users will be able to read the prescriptions of each aspect of the model component and its direction when the mouse is positioned over the particular text. Here are some examples.



Exhibit 10: Model's Prescriptions





CO	MPONENT	ASPECT	ITEM	MIW
			(Competencies & Sub- competencies)	
A	ANALYZE	Dimension 1: Knowledge – "what we know & understand" Integrating – Knowledge	 21st century themes, subject, topic, subtopic, learning objectives, etc. learners' profiles – readiness, learners' attributes/ psychological profiles. types of media chosen integration of media 	• Multiple Integration Worksheet - is weekly planning information
		Dimension 2: Skills – "how we use what we know" Developing: Skills	 creativity critical Thinking communication collaboration other related items: method, technique, approach, assessment, etc. 	displayed from items selected by users in the model that indirectly generates yearly
S	STRATEGIZE	Dimension 3: Character – "how we behave and engage in the world" `Building: Character	 mindfulness curiosity courage resilience ethics leadership 	 Instructional planning (YIP) automatically. Users may select items from it to create several Instructional Planning
		Dimension 4: Meta-Learning - "how we reflect & adapt" Instilling Meta- Learning	 <i>metacognition</i> <i>growth mindset</i> 	Activities (IPAs) for the week.
Ι	IMPLEMENT	Adapting & Applying Instructional Planning Adapting Applying	All selected items and content are gathered & displayed in MIW for adapting & applying in the creation of IPA for best classroom practices.	
E	EVALUATE	responding reviewing	 responding to the feedback reviewing the instructional planning strategies for improvement 	
		revising	 revising the instructional planning strategies for future redesigning 	

Exhibit 12: Components, Aspects, and Items of The Integral ASIE ID Model

F. THE PROCEDURAL APPLICATION OF THE INTEGRAL ASIE ID MODEL

(i) Introduction

Exhibit 13: CIDS Main Menu

	Commonly/freque	ntly used Menu			
	Å		-		
\leftrightarrow \rightarrow C (asiemoc <mark>el.net</mark> /model/main9.php				२ 🖻 🖈 🗯 🔲 🍓 🗄
CIDS 9.5	🖹 IPA 🕂 Create New Record 🔍 Open	tecord 🗎 YIP 🎛 Timetable			ASIE Guest 😞 🗸
Collapse Menu	COLLABORATIVE INS (CIDS) 7ransformáng, teachers	TRUCTIONAL DESIGN SYSTEM	BOSTON HIGH		
Profile			Boston Test School, Suffolk		
Settings	– Main Menu		Massachusetts, United States		
Communication		An Interactive Instructional De	sign Tool adapted from the	Planning Concept and Terminology 1 Four-Dimensional Education Framework	What should I do?
 i Help 			S	Info	rmation
Exit	-		STRATEGIZE		

The Integral ASIE Instructional Design Model is an integrated strategical approach to the design of the instruction in fulfilling the learners' needs in today's learning environment.

Items of the model are based on the **Four-Dimensional Education** released by the *Centre for Curriculum Redesign - CCR* (2015).

These items/content of each aspect are competencies and sub-competencies required by students that are infused into the teachers' instructional planning activities. The selection of the competencies & sub-competencies for each discipline of subject is indicated by colours. This is the result of the research done by CCR. Thus, CIDS has inserted an AI element in determining which competencies and subcompetencies are relevant to each subject. However, the user is free to select any other item that is relevant to the discipline or subject.

(ii) Procedures

Exhibit 14: First Component - Analyze

Dimension 1 - Integrating-knowledge

Creating specific information on **Essential Content** items: **Themes** –embedded across knowledge in various **Disciplines, Branches, Subjects Profiles & Core Concepts** (including processes)

Integration of knowledge of the 21st century themes, pedagogical aspects, and resources required to meet the "learner-centered " approach in the teaching and learning processes. It is blended into the instructional profiles as part of instructional planning in the component



• The model begins with the first component that deals with knowledge integration. An individual teacher or a group of teachers may collaboratively analyze the suggested aspects in the first component of the model, which includes the instructional profiles such as 21st century theme, subject, topic, subtopic, learning objectives, learners' readiness, material and resources (*instructional media profile*) or other instructional profiles for the particular subject. Teachers may select the content provided in each item or add their content (*highly customized*).

(iii) Items:

- 21st Century Themes
- other necessary pedagogical planning items such as Main topic, Subtopic, Learning objective, etc. (customizable)
- multiple intelligences
- type of instructional media
- or other required items

(iv) Operational/technical procedures

- Create record (*follow help menu*).
- Users may press to select/add contents for each item.
- Press Save to save the information on the record.

Users may point at the information icon at each item to read the instructions. Information of the procedural flow will be displayed after each dimension has been saved. Users are requested to read the instructions and press the appropriate button.

Exhibit 15: Integrating - Knowledge

Dimension 1: Integratin	ig - Knowledge	Instructional Profiles
What we know and unde	rstand"	Creating specific information on Essential Content items: Themes –embedded across knowledge in various Disciplines, Branches, Subjects Profiles & Core Concepts (including processes)
4DEdu INTE Knowledge "What we know and understand" Interdisciplinarity Traditional (i.e. Mathematics)	GRATION OF 4DEdu-CIDS F	RAMEWORK – INTO INSTRUCTIONAL PLANNING PROCEDURES
Modern (i.e., Entrepreneurship) Themes (i.e., Global Literacy)	The need of knowing	& understanding instructional profiles in instructional planning
21st		Select your choices or fill in
Learner	21st Century Themes	Select your choices or fill in
ANALYZE	Main Topic	Select your choices or fill in
Integrating - Knowledge	Subtopic	Select your choices or fill in
	Learning Objectives	

Dimension 1: Integ	rating - Knowledge	Learners' Profile	s
	a unaerstana In	formation on learners readiness and resources that will be used with teache in learni	ers ing
4DEdu INTER Knowledge "What we know and understand Interdisciplinarity Traditional (i.e. Antrapeneurship) Modern (i.e., Lintrapeneurship) Themes (i.e., Global Literacy)	GRATION OF 4DEdu-CIDS FRAMEW	/ORK – INTO INSTRUCTIONAL PLANNING PROCEDUI	RES
	Record Name	ENG1	
21st Century Learner	Select only the required items. Unsele Please press the Change Settings but	cted items will not be displayed in MIW and IPA. con for customization	
CIDS	Multiple Intelligences	Select your choices or fill in]
ANALYZE	Types of Instructional Media	Select your choices or fill in Save Types of Instructional Media	Press
Integrating - Knowledge	Instructional Media Integration (Optional) Press Save Types of Instructional Media to enable	e the selected items to appear	

Exhibit 16: Procedural Flow

Instructional Planning Procedural Flowchart You have the following options:					
• Simple IPA format: Click on the button Edit MIW – Create IPA to continue forming an Instructional Planning Activities (IPA).					
• Other IPA format (customized): Press any button to select planning items if necessary, OR select all buttons according to the flow of the planning procedure. At the end of the selection, press Edit MIW – Create IPA.					
Instructional Profile Profile					
Developing - Skills - Building - Instilling - Edit MIW Meta-Learning - Create IPA					
Success!					
Record has been updated.					
Press Back to return to previous page.					
Press Create Modular Learning - The combination of subjects/topics in the same class level or the different class level (single or combined classes)					
Yress Link to ti'r Kesources - i'r reguirea. Press Create New Record - create new weekly record					
Press Next Aspect - to complete IPA					
Back MIW Next Aspect Close Create Modular Learning Link to YIP Resources Create New Record					

Second Component – Strategize





Aspect: Developing – Skills

Items:

- 21st century learning skills
- pedagogical planning items

In the second component of the model, features of 21st-century learning skills analyzed, including various instructional tools (*pedagogical planning items - techniques, methods, and activities*) are selected. A list of character building and appropriate meta-learning items (*metacognition and growth mindset*) are identified.

Exhibit 17: Operational/technical procedures

- On the same record created record, follow the next step
- Users may press to select/add contents for each item.





Instructional Planning Procedural Flowchart You have the following options:						
• Simple IPA format: Click on the button Edit MIW – Create IPA to continue forming an Instructional Planning Activities (IPA						
Other IPA format (customized): Press any button to select planning items if necessary, OR select all buttons according to the flow of the planning p selection, press Edit MIW – Create IPA.						
Instructional Profile Profile						
Developing - Skills Building - Character Meta-Learning Edit MIW Create IPA						
Success!						
Record has been updated.						
Press Back to return to previous page. Or click Next Aspect to proceed to the next planning procedural flow.						
Back MIW Next Aspect Close						

Exhibit 18: Building - Character





Operational/technical procedures

- On the same record created follow the next step
- Users may press to select/add contents for each item.



Operational/technical procedures

• Continue to the next step

Instructional Planning Procedural Flowchart							
You have the following options:							
• Simple IPA format: Click on the button Edit MIW – Create IPA to continue forming an Instructional Planning Act							
• Other IPA format (customized): Press any button to select planning items if necessary, OR select all buttons according to the flow of the planning items if necessary, OR select all buttons according to the flow of the planning items if necessary.							
Instructional Profile Profile							
Developing - Skills - Building - Instilling - Meta-Learning Edit MIW Create IPA							
Success!							
Record has been updated.							
Press Back to return to previous page. Or click Next Aspect to proceed to the next planning procedural flow.							
Back MIW Next Aspect Close							



Exhibit 19: Instilling – Meta-Learning



• Users may press to select/add contents for each item.



Exhibit 20: Operational/technical procedures

• Continue to the next step



Exhibit 21: Third Component – Implement



- Adapting instructional planning adapting the designs created at this macro level to serve as a guide in the development of Instructional Planning Activities (IPA) at the micro-level
- **Applying instructional planning** daily lesson plans developed based on this model will be implemented in the learning process. The selected items are shown in the Multiple Integration Worksheet (MIW) automatically. It is weekly instructional planning for the creation of IPA.



Exhibit 22: the Multiple Integration Worksheet (MIW)

• In the third component of the instructional flow, the IPA will be used as a guideline for the teaching and learning process. The strategies prepared in IPAs will determine their appropriateness and effectiveness for the best practices in the classroom.

Multiple Integration Worksheet (Miw) – Planning At Macro Level

Information selected or written in the 1st & 2nd component of the model (*Analyze & Strategize*) is compiled or inserted in the MIW. It will be displayed when the user clicks on any aspects of the 3rd and 4th components of the model (*Implement & Evaluate*).

- MIW can be edited for improvement
- MIW exhibits plans tailored to the learning topics. Items of the MIW can be selected to create several daily lesson plans (IPAs)
- MIW and IPAs can be stored in PDF file format.

Exhibit 23: The Multiple Integration Worksheet



Exhibit 24: Multiple Integration Worksheet (MIW)



				Supervisors' Remarks	What sh	ould I do? (
		Endorsement				
		Name	Position	Remarks	Date	Endorsemen
District Education Officer	•	DR. MIOR HAMDAN BIN HJ. GHAZALI	Pegawai Pendidikan Daerah Pejabat Pendidikan Daerah Kinta Selatan	Overall remarks: Congustuisons. Description: Terma kash atas usaha dan komtmen anda.	01-05-2021 7:59 AM	Verified
Headmaster	Þ	SHAFARI BIN TAIB	Headmaster SEKOLAH KEBANGSAAN PENGKALAN BAHARU		02-05-2021 11:03 PM	Verified
Director of State Education Department	•	DR. NOHO SUMAINI BN NCHAMED ALI PC.M.	Director JABATAN PENDIDIKAN PERAK	Overall remarks: Congranulations and keep it up.	20-05-2021 03:29 PM	Verified
Observer	•	DR. HJ. ISMAIL MD. ZAIN P.M.P.	Observer HELP CENTRE	Remarks for this DLP: (Select or leave blank if not required) Description Trif in or leave blank if not required)	24-05-2021 3:29 PM Press to set date, time automatically and proceed to verify the planning.	Verify
				U	MIW 61	BNU KHALDUN
		Link to Shared Resou	rces Edit DLP De	lete DLP Print/Save PDF Go to YIP Main Pag	e	
		••		↑ T		<u> </u>
		Upload sharing material	Create/ Edit IPA	elete Print/Save PA PDF	List	of IPA eated

Instructional Planning Activities (IPA) – Planning At Micro Level

The content of IPA is in 2 parts, following the model's component.

- The first part is the information about the selected items from MIW- 1st & 2nd component of the model (*Analyze & Strategize*).
- The second part is the information about the teaching and learning activities (facilitating activities, learners' engagement activities) as indicated in the 3r^d component of the model (*Implement*) as well as impact, reflection, and remark as indicated in the 4th component of the model (*Evaluate*).

Exhibit 25: The Instructional Planning Activities (IPA)





Planning requires self-reflection before or after the learning process or an evaluation from a colleague, and learners.

This component has 3 aspects that need to be studied:

- (i) **Responding to instructional planning** responding to the feedback
- (ii) **Reviewing instructional planning** review the strengths and weaknesses of the instructional planning strategies for improvement
- (iii) **Revising instructional planning** revising the instructional planning strategies for future redesigning.

Purpose: Further improvement of the strategies developed for future redesigning in producing and sustaining high-quality instructional planning strategies.

Besides preparing a lesson for the teaching and learning process, the IPA is also applicable for evaluation purposes. CIDS provides a tool *Learners' Competency-Requirements Inventory* (*LCRI*), as well as for *Lesson Study* activities.

- However, evaluation does not only take place at the end of the planning but at every component of the model as indicated by dotted lines linking to each component of the model. The Reflection Cycle is another form of evaluation/reflection for teachers in their instructional planning process as indicated by the green circle.
- Other advanced features benefit teachers in their instructional planning as well as instructional leaders (*principal, headmasters, inspectorates, evaluators*) in monitoring, supervising, guiding, evaluating, and accessing the teachers' professional competencies.

• The latest version of the model has various options, allowing teachers to create IPAs according to their respective needs and environment (*home-based learning/blended learning*) creatively and professionally and creating a Lesson Study to share their planning.



Exhibit 27: MIW

G. ENHANCING INSTRUCTIONAL ACTIVITIES

Insert external resources/local folders in to the lesson plan (images, video clip) & display/link to the resources

Exhibit 28: Insert external resources & from local folders

	I	NSERTING EXTERNAL	RESOURC	ES IN THE INSTRUCTIONAL PLANNING				
Link to Reflection	Resources		Press at the icon Insert link	Type of Content: WW Coogle Co				
Ready for Observa	tion			Link Cancel				
Link to Shared Resort Make selection: DLP Format A O DLP Format Make selection: Apply this format for	B Doc	Tools for creating learning activities (Sides) Sheets Forms (DELIMa) Info Images	Resource fror You may link t You Tube	n local drive must first be uploaded to Google Drive or OneDrive to: Video Clip - video clip URL from YouTube				
This record only O All new re	cords	IMPLEMENT	Google Image Link from Google - copy and paste URL from website					
Instructional Facilitation &	Learners' Engagement	TEACHING AND LEARNING ACTIVITIES Planning items	Google	Info Link from Google - copy and paste URL from website				
Events	0	Learners' Readiness	4	Resource Link from Google Drive - copy and paste URL from website				
Induction 0 Minutes	≜ + -	Students have been exposed to this topic before Types of Media Audio clip	Georgie Chine Broge Casserem	Resource Link from Google Classroom - copy and paste URL from website				
		21st Century Learning Skills Creativity		Resource Link from Microsoft OneDrive . conv and paste URL from website				

Exhibit 29: Comunication

Virtual interaction (briefing, learning, meeting, discussing, etc.) using CIDS-VideoCorps

← → C 🖷 v	videomeet.asiemodel.net/html5client/joi	n?sessionToken=qvmy	wa6nw0ochu8j				■ Q	A 🖻 🗯 🍓	
ssages	C Public Chat	৻ঀৣ			HELP CENTRE				
NOTES Shared Notes USERS (1) DR. H.L. ISMAIL	Welcome to CIDS VideoCarps1 harr communitatioth ruhanel Selamat Dataig ke Kanistiti CIDS VideoCarps Sultram kommikka ruha. What Shoolid IDo? • Initraet Via Video with dual camera • Initraet Via Video ket diajata & graphic sketches • Share holes	WELCOME TO CIDS VIDEOCORPS SELAMAT DATAVIG KE CIDS VIDEOCORPS							
	 Inert 6. share video cilj from YorTube Share presentation Prins hret 0. smatch video tuesentation Berinberaksi melalti paparan video melalti dmi kaneta Berinberaksi melalti paparan tulisan kakatan grafik Berinberaksi melalti paparan tulisan kakatan grafik Beringsi nota Chat Menyigi a berkenga paparan klip video dari VorTube Berinbahan Eskand ji ulutuk mesonoton tertsembahan tudeo 	CHAT O Send public & private messages Hontar mesej awam & persendirian	SHARED NOTES Share & save notes Berkongsi & menyimpan catatan	DUAL WEBCAMS	AUDIO Audio communication Berkomunikasi melalui audio	SCREEN SHARING	MULTI-USER	EXTERNAL VIDE D Link to external video Pautan ke video Juar	
			• If you • Click • Jika a • Tekar	u are a presenter, press the on the icon below for spec inda seorang presenter, tek o pada ikon di bawah untui	e next slide to go to the cific actions kan slide seterusnya un k tindakan tertentu	r multi-user interaction boa	ird in board		

Exhibit 30: Record Management

ix. Record Management – buttons for various functions

		EVALUATE		What should I do?
		Learning Impact / Self R	teflection	
Update : 15-0-	4-2021 14:32:43			
Link to Reflec	tion Resources			
		Supervisors' Rema	arks 5	What should I do? 🤳
		4 Submit For Endorse Press to submit the completed	ment MIW and DLPs	
Endorsemen	t			
1	Position	Remarks	Date	Endorsement
Name				
Name				

x. Record Management – other buttons for other links

- xi. Evaluation is one of the components of the model, thus CIDS provides a proposed *Learners' Competency-Requirements Inventory (LCRI)*, evaluation items/rubric for users, particularly administrators, to continue monitoring teachers' planning and teaching practices for further improvement and upskilling in the Continuous Professional Development (CPD) program. Observation and Reflection evaluation items are provided for the Lesson Study. Both evaluations allow customization of the item to fulfill the institutional needs.
- xii. Statistical display The Statistical Analysis of the CIDS application by users is available at administrative levels where it summarizes the number and percentage of users in schools, district, and country. Besides, a statistical display on the pedagogical aspect of instructional design (*the integration of the 21st Century learning dimensions and items*) is also displayed.

Sampel of CIDS User Statitical Analysis



Sample of the frequency usage of the 21st Century dimensions in the instructional planning



H. OTHER OPTIONAL PLANNING ACTIVITIES

Exhibit 31:	Lesson	Study	Introduction	Page
		Study	inti ouucuon	I ugu

		Boston Te Suffalk M	STON IGH est School,					
		Surrork, Wa	assachusetts		Tool Kit LS3			
LESSON STUDY								
OBSERVATION FORM								
	TEA	CHER'S TEA	ACHING PROFILE					
Name: ASIE Guest	Class Level: 4th Grade	Class	:: K4 Alpha	No. of Students: 16				
Subject: Demo English Date:			ate: Monday, 19-06-2023 Time: 8:00 AM To 8:30 AM					
OBSERVATION INFORMATION								
Date & Time:			Name of lesson study group	o members:				
			Name of knowledgeable oth	hers:				

Exhibit 32: LCRI Introduction Page

LEARNERS' COMPETENCY-REQUIREMENTS INVENTORY Information on an appropriate selection of competencies & sub competencies infused in the instructional planning & teaching TEACHING PROFILE Name: ASIE Guest Class Level: 4th Grade Class: K4 Alpha No. of Students: 16 Subject: Demo English Date: Monday, 19-06-2023 Time: 8:00 AM To 8:3 Date & Time:	ASIE Guest Evaluatee		ROSTON HIGH Inston Test School	В	Ismail Evaluator
Information on an appropriate selection of competencies & sub competencies infused in the instructional planning & teaching TEACHING PROFILE Name: ASIE Guest Class Level: 4th Grade Class: K4 Alpha No. of Students: 16 Subject: Demo English Date: Monday, 19-06-2023 Time: 8:00 AM To 8: Date & Time:		NVENTORY	CY-REQUIREMENTS	ARNERS' COMPETEN	l
Name: ASIE Guest Class Level: 4th Grade Class: K4 Alpha No. of Students: 16 Subject: Demo English Date: Monday, 19-06-2023 Time: 8:00 AM To 8: Date & Time: Please press to choose)	practices	ructional planning & teaching praction	ub competencies infused in the i ACHING PROFILE	priate selection of competencies & TE	Information on an app
Subject: Demo English Date: Monday, 19-06-2023 Time: 8:00 AM To 8: Date & Time:		No. of Students: 16	Class: K4 Alpha	Class Level: 4th Grade	Name: ASIE Guest
Date & Time:	AM	Time: 8:00 AM To 8:30 AM	Date: Monday, 19-06-2023		Subject: Demo English
ASIE Guest × (Please press to choose or full in)				ng: (Please press to choose or fill in)	Date & Time: Please press to choose) Name of teachers involve in teac ASIE Guest ×

I. STRENGTH AND CAPABILITY

Generally, the strengths of the Integral ASIE ID Model are as follows:

- Designing instruction at macro and micro level systematically and professionally
- Allows customization to meet users' requirements
- Sharing teaching records (*lesson plan*)
- Uploading all types of teaching resources
- Interacting, communicating, and collaborating, and sharing information
- Guidance, endorsement, and validation of the instructional planning can be carried out professionally at different administrative levels.
- Provide evaluation items for teachers' competencies.

i. The impact of the Integral ASIE ID Model

Teachers

- Teachers can plan and strategize their instruction effectively and professionally to fulfill learners' abilities.
- Time effective
- Reduce teachers' burden on preparing the lesson.
- Provide sharing of ideas, planning documents, and resources through its features.
- Establishing to unlearn, learned, and relearn society to learn different approaches in educational design, relearn new strategies formulated in response to the changes in the educational landscape, and unlearn the past experiences through the transformation process in creating awareness of the importance and impact of current innovation in ID towards the 21st-century education, establishing a better future living for the next generation in preparing them to the Industrial Revolution IR4.0, IR5.0 for their future career development. Thus, it improves the quality of education and enhances teachers' professionalism, creating awareness towards lifelong learning as required by The Sustainable Development Goal 4 –Education 2030 Agenda (UNESCO).

Learners

- Equal opportunities for gaining knowledge & skills' regardless of their differences in abilities, result from the high-quality systematic design of teachers' instructions.
- Unleash their potential through learners' centered approached
- Established globally competitive learners following the 21-century learning needs
- Inspiring learners learning is not just gaining knowledge and skills but responding to the industrial needs for future employability.

School Administrators

- Accessible for verification, monitoring, and evaluating the process
- Time effective for supervision purposes
- As a mechanism for identifying teachers' competencies (strengths and weaknesses)
- Assist in identifying the relevant CPD courses for teachers

Education Ministry

- Cost-effective using online ID application
- Time effective accessible for monitoring, supervising, and evaluating the process
- Establishing a complete network and database of teachers' instructional planning

J. SUMMARY

CIDS comprises The Integral ASIE Instructional Design Model

- ✓ The Integral ASIE Instructional Design Model is an integrated strategical approach to the design of the instruction in fulfilling the learners' needs in today's learning environment.
- ✓ It is a simple and practical planning tool that allows teachers to strategize approaches, methods, and activities for learners to determine their own choices that will motivate them to engage with inspiring learning activities while preserving the characteristics of teachers' professionalism in learning and facilitating procedures.
- ✓ The 21st learning framework of Four-Dimensional Education has been selected as a major instructional design component in CIDS.
- ✓ It responds to the **challenges of 21st-century learning** and perhaps **provides a solution for teachers to design instruction professionally, effectively, and systematically.**
- ✓ For user convenience, CIDS provides user manuals, reference materials, information materials, and video guidance to understand and facilitate the application and operation of this model.

REFERENCES

Anderson, J., and Glenn, A. (2003). Building Capacity of Teachers/Facilitators in Technology-Pedagogy Integration for Improved Teaching and Learning. Bangkok, UNESCO Regional Office for Education in Asia and the Pacific. http://www.unescobkk.org/fileadmin/user_upload/ict/ebooks/ ICT Building Capacity /BuildingCapacity.pdf (Accessed 6 January, 2012).

Andrews, D.H. & Goodson, L.A. (1981). A comparative analysis of models of instructional design. In Anglin, G.J. (1981) (Ed.). Instructional Technology: Past, Present, and Future. Englewood, Colorado: Libraries Unlimited, Inc.

Cox, M. J., and Abbott, C. (Eds.) (2004), ICT and Attainment – A Review of the Research Literature. Coventry, Becta /London, DfES

Darling-Hammond, L. (2006), Powerful teacher education. San Francisco: Jossey-Bass.

Dick, W., and Carey, L. & Carey, J. (2004). The Systematic Design of Instruction. Allyn & Bacon; (6th Ed.)

Fadel., Bialik. M., Trilling B. (2015). Four-Dimensional Education: The Competencies Learners Need to Succeed, Centre for Curriculum Redesign, 2015.

Gustafson K.L., Branch R.M. (2002). What is Instructional Design?. In R. A. Reiser, J.V. Dempsey (Eds.), Trends and Issues in Instructional Design and Technology. Upper Saddle River, NJ: Merrill Prentice Hall.

Heinich, R., Molenda, M., Russell, J.D., & Smaldino, S.E. (2001). Instructional media and technologies for learning (7th Ed.). Englewood Cliffs, NJ: Prentice-Hall.

Ireland, T. (2007). Situating connectivism. Retrieved November 7, 2008, from http://design.test.olt.ubc.ca/Situating_Connectivism

Ismail Md. Zain., M. Balakrishnan., Wahid Hashim. An Integral ASIE ID Model: The 21st Century Instructional Design Model For Teachers. Universal Journal of Educational Research 4(3):547-554, 2016. DOI: 10.13189/ujer.2016.040311.

Ismail Md. Zain., M. Balakrishnan., Wahid Hashim. An Integral ASIE Instructional Design Model: An Integrated Approach In Instructional Planning For The 21st Century Learning & Teaching Environment. GSE E-Journal of Education. Vol. 3, 2015.

Ismail Md. Zain. Best Practices Of ICT Integration Strategies For Teaching And Learning. An Approach to Generate Critical and Creative Minds. European Academic Conference & Mediterranean Cruise Program 6-8 Jun 2012. Journal of Teaching and Education, University Publications.net.CD-ROM. ISSN: 2165-6266, 2(3):79–86, 2013.

Ismail Md. Zain. Instructional Media Integration Strategies for Basic Development of Human Capital: An approach to generate critical and creative minds in the teaching and learning process. The Macro theme Review 2(2) 55-64, Spring 2013.

Ismail Md. Zain, M. Balakrishnan. An Integral ASIE Instructional Design Model: Towards Higher Order Thinking Skills in Designing Instruction, National Conference on the Development of Higher Order Thinking Skills, Kinta Riverfront Hotel, Ipoh Perak. Examination Council, Malaysia Ministry of Education, 14-16, 2014.

Jefferson, J. C. (2007). Teaching in the 21st Century A Review of the Issues and Changing Models in the Teaching Profession, County School District Colorado,

Jonathan, E. (2019). Education 5.0 - towards problem-solving and value creation. Retrieved May 2019 from https://bulawayo24.com/index-id-opinion-sc-columnist-byo-157170.html

Keller, J. M. (2010). Motivational design for learning and performance: The ARCS model approach. New York: Springer.

Malaysia. Malaysia Education Blueprint 2013-2025, Malaysia Ministry of Education. Kuala Lumpur, 2013.

Mehmet, C. S. (2009). Instructional design principles for 21st-century learning skills. World Conference on Educational Sciences 2009. Procedia Social and Behavioral Sciences 1 (2009) 1464–1468.

Mishra, P., & Koehler, M.J. (2006). Technological Pedagogical Content Knowledge: A framework for teacher knowledge. Teacher College Record, 108, 1017–1054.

Newby T.J., et al. (2000). Instructional Technology for Teaching and Learning. New Jersey: Prentice-Hall.

Novak, J.D. (2010). Learning, Creating, and Using Knowledge: Concept Maps as Facilitative Tools in Schools and Corporations (2nd Ed.). New York: Routledge, Taylor-Francis.

Oblinger, D.G., Oblinger, J.L. (2005). Educating the Net Generation. Retrieved November 2015 from <u>http://www.educause.edu/educatingthenetgen/</u> Partnership for 21st Century Skills (2008).

Resnick, L.B. (1989), Introduction. In L, B, Resnick (Ed.), Knowing, learning, and instruction: Essay in honor of Robert Glaser (pp. 1-24). Hillsdale, NJ: Lawrence Erlbaum.

Reiser, R. A. & Dempsey, J. V. (2007). Trends and Issues in Instructional Design (2nd Ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Richard D.F. (2004). What Is a Professional Learning Community? Schools as Learning Communities Pages 6-11, May 2004, Volume 61, Number 8.

Richey, R.C., and Klein, J.D. (2011). The instructional design knowledge base: Theory, research and practice New York: Taylor and Francis Group

Safeer, Richard S., and Jann Keenan. "Health Literacy: The Gap Between Physicians and Patients."AmericanFamilyPhysician.2005Aug1;72(3):463-468.http://www.aafp.org/afp/2005/0801/p463.html

Siemens, G. (2005, January). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology & Distance Learning*, Retrieved November 03, 2008, from http://www.itdl.org/Journal/Jan_05/article01.htm

Seel, N. M. (1997). Model of instructional design: introduction and overview. In R. D. Tennyson, F. Schott, N. Seel, & S. Dijkstra (Eds.), Solving instructional design problems, instructional design: International perspective Vol.1 (pp. 355-360). Mahwah, NJ: Lawrence Erlbaum

Theroux, P, (2001). Comparing Traditional Teaching and Student-Centered, Collaborative Learning

UNESCO, (2014). UNESCO Education Strategy, 2014-2021. United Nations Educational, Scientific and Cultural Organization: Place de Fontenoy, Paris, France.

UNESCO. 2010. ICT Transforming Education: Regional Guide (Editors J. Anderson). UNESCO, Bangkok. [Online]. Available: http://unesdoc.unesco.org/images/ 0012/ 001295/129538e.pdf (Accessed 1 January 2012)

UNESCO. 2002. Information and Communication Technology in Education: A Curriculum for Schools and Programme of Teacher Development (Editors J.

UNESCO. 2005. Regional Guidelines on Teacher Development for Pedagogy-Technology Integration [Working Draft] (Editor Shyamal Majumdar). UNESCO, Bangkok

Wang, Q., & Woo, H. L.. (2007). Systematic Planning for ICT Integration in Topic Learning. Educational Technology & Society, 10 (1), 148-156.

APPENDICES

CIDS – MAIN PAGE



AN INTERACTIVE ASIE ID MODEL - MAIN MENU

CIDS 9.5	■ IPA # Lesson Study # LCRI		Ismail 🧖 -
Collapse Menu Home Profile	COLLABORATIVE INSTRUCTIONAL DESIC (CIDS) Prinsforming teachers inspiring learners	Ismail	
Language		Massachusetts, United States	
	Instructional Planning • Instructional planning for all subjects for all types of sch format can be customized to meet the current needs of a Monitoring, verification of various levels of administration	rools, • The flexible planning 21st-Century Education. • n.	SIDELAT Description Constructio
	Lesson Study	LCRI	
	Plan, teach, observe, and share information collaboratively as a result of	Learners' Competency-Requirements Inventory: a flexible rubric for identifying	



INSTRUCTIONAL PLANNING PAGE (ASIE MODEL)

LIST OF LIST OF PLANNING RECORDS

CIDS 9.0	Home + Create New R	lecord	Q Open Recor	rd 🛯 🔐 Supervised Record 🛱	Switch to Versia	in 8							DR. HJ. ISMAIL MI
Collapse Menu		Ор	en Reco	rd								Liet	t of created records
Counseling												LISI	for created records
Record												What	t should I do? 🧯
🛠 Co-curricular		State:		District: S	School Name:	Name:			Subject Category:		Subject:	Display	Limit:
₩ Evaluation		All S	tates	~ All ~	All 🗸	All		\sim	All	~		~ 10	✓ Search
Profile													
Settings		You ca	n endorse teaching	records in bulk to simplify the verifica	tion process.							Supervised I	Record
Ltd Statistics		To use	this feature please	press the Supervised Record button.									
Language								Clas	is & Last				
Virtual Learning - PLC								Sub	mission Date				
Communication								DLP	- Need Endorsement				Action
Video Tutorial								DLP	- Endorsed				Red mark - Action
🔗 Links		No.	Week	Information	Name		Subject	DLP	- Re-endorse (if required)	Date & Teach	ning Time		taken
i Help		1	Week	BIY4W29	KHAIRUL H	ELMY BIN	English	мім	25-08-2021	30-08-2021 —	03-09-2021		Endorsement
			35	Year 4	NABURI SEKOLAH KEBA	NGSAAN GOPENG,	Overall Total DLP submitted: 1	4 DL	P (Total DLP: 1) P 1 25-08-2021	Monday 30-08-	2021 : 10:45 AN	4-11:45 AM	
≓ FAQ			Teaching		PPD Kinta Selat	tan, Perak, Malaysia							
🕞 Exit			Week 29										
		2	Week	BIT6W29	KHAIRUL H	ELMY BIN	English	мім	V 25-08-2021	30-08-2021 —	03-09-2021		Endorsement
			35	Year 6	ear 6 NABURI Overall Tot: SEKOLAH KEBANGSAAN GOPENG,		Overall Total DLP submitted: 2	6 UTARID (Total DLP: 1) DLP 1 25-08-2021		Monday 30-08-	2021 : 10:45 AN	4-11:45 AM	C) choorsement
			Teaching Week 29		PPD Kinta Selat	PD Kinta Selatan, Perak, Malaysia		6 M/ DL	ARIKH (Total DLP: 1) P 1 25-08-2021	Monday 30-08-	2021 : 10:45 AN	/I-11:45 AM	
		3	Week	PENDIDIKAN MORAL	ZAINAL BIN SEKOLAH KEBA	I BAHARI INGSAAN KHIR	Moral	МІМ	V 25-08-2021	30-08-2021 —	03-09-2021		Endorsement

A WEEKLY TEACHING RECORD (MIW)



INSTRUCTIONAL PLANNING ACTIVITIES (DAILY LESSON PLAN)

CIDS 9.5	🗈 IPA 🛛 🕂 Cre	ate New Record 🛛 Q. Open Record 🌐 YIP 📾 Timetable 🔮 Supervised Record 📑 Record: BI T3M M9 🔹		DR. HJ. ISMAIL MD. ZAIN P.M.P. 🧖							
Collapse Menu											
A Home	INSTRUCTIONAL PLANNING ACTIVITIES										
Record	(Teaching & Learning Activities)										
Profile	Instructional	Eacilitation & Learners' Enganement	Planning Items	Remarks							
🔅 Settings	Events	ravination a Learner 2 Engagement	i anning terrs	in the second seco							
Ltd Statistics	Set Induction	1. Pupils revise the vocabulary that they have learned before in the previous lesson.	21ST- CENTURY THEMES	Learning video:							
Language	5 Minutes	2. Pupils open their textbook Get Smart Plus 3 on page 18. Direct pupils' attention to the vocabulary section at the top of the page and point out the words.	Information literacy (evaluate, synthesize, transform information into usable knowledge)	https://www.youtube.com/watch?							
Communication Video Tutorial Help FAQ Helt FAQ		3. Play the video a few times and have pupils listen carefully, point to the words and repeat. (Video 1): Get Smart Plus 3 Year 3 Module 2 Vo Get Video 1 are Video 1 are Our world Our worl	Types of Instructional Media Video cip Web page Text Book Instructional Media Integration Video clip Lusanto anaver questions Video for classroom activities Web page Video for classroom activities Lister to perform learning activities	v=Rp2CTba2MW							
		irrelighter put out fires ijfeguard sove people ijfeguard ijfeguard Watch on > Youñube 4. Say the words again in random order. Pupils repeat and point.	Usern to answer questions Valent for undestanding of the topic Valent for undestanding the topic Skills Creativity Consecting, reorganizing, and refining ideas into a cohesive whole Critical Thinking Lefettiying, califying, and organizing information	htps://www.youtube.com/watch? v=8o1b/Yigerdo							









Abstract Design of instruction is an important feature in much needed. It requires teachers to understand deeply the teacher education at fulfilling the needs of 4Cs (critical areas of instructional design as part of their instructional thinker. communicator. collaborator. creater) developine "a planning, to ensure our education system continues to

Online Course Taking Behavior for On-Campus College Students, John J. Cheslock, Karly Ford, Liang Zhang, and Janet M. Dillon.



Inquiries: drismailzain@gmail.com +60195713745