

Applying Understanding by Design (UbD) in Education 2.0

Hager Gamal Ahmed Labib al-Tonsi
Lecturer of Curriculum and Methods of
Teaching English
Faculty of Education, Arish University

٢٠١٨/٩/٢٠ م

تاريخ استلام البحث :

٢٠١٨/١١/١٨ م

تاريخ قبول البحث :

Abstract

The new education system in Egypt (Education 2.0), introduced in September 2018, aimed to encourage students to learn, think, and innovate. The Ministry of Education and Technical Education did not offer a lesson planning model for the new curriculum. Thus, this research suggested a lesson planning model based on Understanding by Design (UbD) to achieve the goals of TEFL in the new education system. The research adopted the descriptive method approach. A semi-structured interview were administered to seven EFL experts at The Ministry of Education and Technical Education. Analysis of their answers revealed that they believed that the suggested lesson planning model based on UbD could achieve the goals of TEFL in the new education system.

Keywords: understanding by design, Education 2.0 , lesson planning

المخلص

يهدف نظام التعليم الجديد في مصر (التعليم ٢.٠) ، الذي تم تقديمه في سبتمبر ٢٠١٨ ، إلى تشجيع الطلاب على التعلم والتفكير والإبداع. لم تقدم وزارة التربية والتعليم و التعليم الفني نموذجًا لتخطيط الدروس المتضمنة في المناهج الجديدة. لذا، اقترح هذا البحث نموذجًا لتخطيط الدروس مبنيًا على التخطيط للفهم لتحقيق أهداف تدريس اللغة الإنجليزية كلغة أجنبية في نظام التعليم الجديد. اعتمد البحث على المنهج الوصفي. تم إجراء مقابلة شبه مغلقة مع سبعة خبراء في تدريس اللغة الإنجليزية كلغة أجنبية بوزارة التربية والتعليم و التعليم الفني. أوضحت نتائج تحليل إجابات الخبراء أن نموذج تخطيط الدروس المقترح، في هذا البحث، يمكن أن يؤدي إلى تحقيق أهداف تدريس اللغة الإنجليزية كلغة أجنبية في النظام التعليمي الجديد.

الكلمات المفتاحية: التخطيط للفهم، نظام التعليم ٢.٠، تخطيط الدروس

Introduction

According to Yurtseven and Altun (2016 a), TEFL aims to use content to develop students' learning skills. Conversely, EFL teachers deal with content as a goal. Thus, EFL curriculum developers should encourage teachers to change their practices (Wiggins & McTighe,2011). Stronge, Tucker, and Hindman (2004) conclude that although there is not an ideal way for planning, teachers should adopt a design model to maintain that the same outcomes are targeted.

Wiggins and McTighe (2006), who introduce the concept of Understanding by design in 1989, define goals as the description of students' desired performance. Such goals are followed by assessment tools and learning activities developed to achieve them. Understanding by design (UbD) is a model for designing curriculum different from the textbook - based curriculum. UbD starts from the ends, thus it is different from the activity-oriented curriculum that begins with activities.

Seel, Lehmann, Blumschein, and Podolskiy (2017) state that learning design and instructional design have the same meaning. They tend to improve students' learning and develop their learning motivation to understand. Such designs depend on the learning outcomes and the teaching-learning process. Instructional design combines learning objectives, topics included in content, methods, and instruments. Instructional design offers a format that includes planning, organization, and implementation.

According to UbD, students' achievement is standard based. Education should develop students' understanding. Evidence of students' understanding appears when they apply knowledge and skills within authentic contexts. UbD reflects the backward design, which overcomes the problems of textbook coverage and activity-oriented teaching. Teachers

provide opportunities for students to explain, interpret, apply, shift perspective, empathize, and self-assess their learning to reveal their understanding (McTighe & Seif , 2003). Wiggins and McTighe (2005) assert that the backward design includes identifying desired outcomes, determining acceptable evidence revealed in assessment, and planning learning experiences and instruction.

UbD is a backward standard-based instructional planning model. It consists of three stages. First, identifying desired results in the form of enduring understanding, big ideas, and essential questions. Second, determining acceptable evidence revealed in assessment. Finally, designing learning activities to develop students' achievement in assessment (Brown, 2004). Wiggins & McTighe (2008) assert that teachers should encourage students to think and apply the skills acquired at schools in real life situations. Learning for understanding helps students achieve three main goals: acquiring important information and skills, making meaning of content, and transferring learning to new situations.

The traditional curriculum design is hands on without being minds on. Thus, students leave schools without essential knowledge (Cho & Trent, 2005). Marzano and Waters (2009) maintain that teachers resist change. Richards (2013) highlights that UbD depends on identifying the learning outcomes, assessment tools, and strategies needed to achieve the learning outcomes. Linder, Cooper , McKenzie, Raesch , & Reeve (2014) illustrate that UbD encourages teachers to identify students' learning goals and how to measure them. The content becomes a tool for achieving these goals. Authentic assessment engages students in learning. Finally, teachers use active learning strategies and offer immediate feedback (Weimer, 2013).

Jackson (2011) states that teachers should write the learning objectives according to the curriculum standards. Teachers develop assessment and activities to help students achieve standards. Teachers plan to cover the

standards and use feedback to support students. They focus on quality instead of quantity. Brown (2004) asserts that UbD develops students' academic achievement as well as enhances teachers' professional development. UbD enables students to integrate knowledge and skills (Ambrose et al., 2010). UbD targets students' learning needs and deepens their levels of understanding (Childre, Sands , & Pope, 2009).

Wiggins and McTighe (2011) highlight the main principles of UbD as a framework for planning. UbD focuses on students' understanding of important ideas and transferring learning to new authentic situations. Learning goals are the reflection of content standards to enhance curriculum quality. Thus, curriculum is planned backward starting with the long-term desired results. The UbD design process includes identifying the desired results, identifying evidence, and designing the learning plan. UbD is the alternative of textbook coverage as well as activity-oriented teaching.

The World Bank specialists maintain that the quality of education in Egypt is inadequate. Despite the high enrollment rates, literacy remains low (World Bank, 2000). That is why, the Ministry of Education issued the National Standards for Education in September 2003. The standards aim at improving the quality of the educational process. They become the basis for the education process (Ministry of Education, 2007). The Education 2030 agenda aims to offer quality education and lifelong learning for all. It focuses on learning outcomes according to global indicators (UNESCO Institute for Statistics, 2016).

According to a variety of international and regional reports, Egypt needs a radical reform in its educational policies and practices. The education system should adopt new approaches to ensure equity and quality of education. There are many challenges to overcome (Megahed,2016). The education system in Egypt suffers from the lack of a pedagogical theory

underlying the educational system. Education in Egypt lacks a long-term strategic vision that visualizes success (UNESCO, 2013).

Thus, the Minister of Education and Technical Education announced a full education sector transformation in August 2017. The transformation focuses on the student as the center of the learning process to ensure quality for all students. There are two parallel streams of reform: Education 1.0 and Education 2.0. Education 1.0 aims to improve the current system. Education 2.0 aims to modernize Egypt's education system through radical changes (UNICEF MENA Education Team, 2018).

The General Framework for Pre-University Education focuses on quality rather than quantity. It also depends on the integration of teaching and assessment to offer a quality-based learning environment for students. Knowledge integration and developing students' cognitive, emotional, and kinesthetic skills are the main assets of the framework. The National Framework offers the guidelines for curriculum developers through highlighting the desired results, teaching-learning strategies, and assessment methods for each stage (Center for Developing Curriculum & Instructional Materials, 2012).

The new education system is designed to help students enjoy better future so that students can place Egypt among the ranks of advanced countries. Egypt's K-12 education system, Education 2.0, starts in September 2018 with KG1, KG2, and Primary 1. It continues until 2030 to prepare students to succeed in a future world that cannot entirely be imagined (Shawki, 2018). Achieving learning outcomes requires the integration of content, assessment, and instructional strategies, which is offered through UbD (Wiggins & McTighe, 2006).

In conclusion, UbD is an instructional planning design based on backward design philosophy. UbD begins with identifying the learning outcomes and evidence needed to be revealed in assessment. Then, the

teacher designs the learning activities that achieve the learning outcomes. Such learning outcomes are derived from the standards of each curriculum. Understanding is the ultimate goal of teaching. Teachers should help students express their understanding in authentic assessment tasks. Teachers should overcome being activity -oriented and become goal-oriented. UbD focuses on quality instead of quantity which achieves the ultimate goal of the new education system (Education 2.0).

Review of Literature and Related Studies

Understanding by design (UbD)

Harris and Hofer (2009) explain that planning a learning experience requires identifying goals and selecting formative and summative assessment tools to reveal goal achievement. Then, the teacher sequences the learning activities and resources needed for designing learning experiences. Schunk (2012) explains that according to the goal theory, learning goals lead students to focus on skills and competencies needed for learning. Students observe their progress and consequently self-efficacy and motivation are enhanced.

Lemov (2010) explains that lesson planning depends on unit planning. Teachers should begin with the end. Teachers identify the objectives, design assessment tools to measure them, and develop learning activities to master them. Jackson (2011) further adds that developing assessment tools based on learning goals enables teachers to design effective learning experiences for students. Thus, content and instructional strategies help teachers monitor students' progress towards achieving the goals.

Michael and Libarkin (2016) are of the opinion that understanding by design (UbD) depends on the theory of backward design. It determines what students should learn and assessment tools to achieve the learning

goals. Wiggins and McTighe (2005) maintain that UbD offers instruction that is neither activity-oriented nor content-oriented. Activity-oriented changes the teachers' role from being a facilitator of students' autonomy into being a monitor of students' activities. Content-oriented instruction is teacher-centered and reduces students' active participation. On the other hand, UbD enables teachers to identify the evidence to be reflected in assessment before designing the learning activities.

Molina (2013) investigated teachers' perceptions concerning backwards planning. Participants were 48 certificated teachers at a public elementary school in Hawaii. Data were collected through interviews, observations, and a survey. Results of data analysis indicated that teachers need training on backwards design to be able to implement it in teaching. Participants were willing to apply backwards planning after receiving the necessary support.

UbD encourages teachers to write objectives, design assessment tools, and develop learning activities according to standards. UbD helps teachers link goals to learning activities and materials, demonstrate content knowledge, and use various teaching practices (Kelting-Gibson, 2005). Reynolds and Kearns (2017) state that UbD enables teachers to prioritize concepts to be covered, manage time effectively, reduce anxiety, engage students, and offer feedback.

Trapani (2016) investigated teachers' perceptions of UbD as an instructional framework. Participants were teachers at a high school and another middle school in New York. Data were collected through The Concerns Based Adoption Model. Participants revealed that they needed more time for guidance and collaboration to be efficient in the UbD implementation.

Applying UbD means that teachers inform students of the big ideas, essential questions, performance requirements, and evaluative criteria at the beginning of the unit. Teachers hold students' interests and use

different strategies to promote their understanding. Teachers facilitate students' active construction of meaning and promote opportunities for students' understanding. Teachers use questioning, probing, and feedback to stimulate students' reflection and rethinking. Students are involved in self and peer-assessment based on performance standards (McTighe & Seif, 2000)

McTighe & Seif (2000) discuss design, teacher, student, and resources in light of UbD. Concerning the design of the unit, it should be coherent. The design is determined by big ideas and essential questions. Knowledge and skills necessary for learning the big ideas and answering the essential questions are identified. Teachers develop assessment and learning activities according to the big ideas and essential questions. They offer students opportunities to explain, interpret, apply, give perspective, empathize, and examine their self-knowledge. Multiple forms of assessment allow students to demonstrate their understanding in various ways. Teachers use textbook and other resources.

Young (2005) investigated teachers' use of UbD. Participants were 39 teachers at a high school in Pennsylvania. The researcher analyzed teachers' lesson plans, unit plans, course curricula, formative and summative assessment to determine the levels of using UbD. The Stages of Concern Questionnaire was administered to determine participants' feelings towards UbD. Results indicated that teachers' concerns about UbD hindered its application. UbD was not clearly applied though some of its elements were used in teachers' practices.

According to Wiggins and McTighe (2005), instruction should be student-centered and goal-oriented. UbD means designing instruction according to identified learning goals and objectives. Understanding is one of the main objectives in TEFL. It is a mental construct that cannot be

measured directly. Assessment of understanding is measured by transfer, which means applying knowledge and skills in new situations.

In sum, UbD modernizes the roles of teachers and students in the learning environment. The teacher designs the learning experiences according to the learning outcomes derived from the content standards. The teacher offers student-centered learning experiences. The teacher attracts students' attention by designing learning experiences reflecting their interests. Developing students' understanding is the ultimate goal of teaching. Understanding is revealed through explaining, interpreting, applying, shifting perspectives, empathizing, and examining self-knowledge. Students become independent learners who are able to transfer the acquired knowledge and skills to new situations.

UbD depends on three main stages: identifying the desired results, identifying evidence, and designing the learning experiences as shown in this suggested figure:

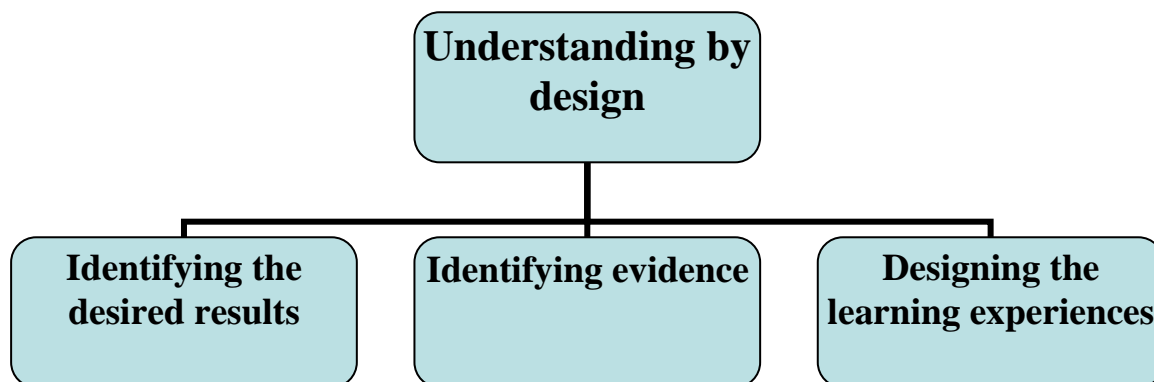


Figure 1: Stages of Understanding by Design(UbD)

First, identifying the desired results

According to Wiggins & McTighe (2011), UbD focuses on the learning objectives. It describes the expected learning outcomes that students should do. It covers three main concepts: acquisition, understanding, and transfer. Acquisition of information and basic skills is expressed through understanding. The six facets of understanding are explanation,

interpretation, application, shifting perspectives, empathy, and self-assessment. Students explain facts and ideas. Interpretation means personal contribution to information. Application is using knowledge in different learning contexts. Shifting perspective requires analyzing different points of view to broaden understanding. Empathy means responding to others' feelings. Self-assessment means analyzing performance for further improvement.

Transfer means using knowledge in new learning situations independently (Wiggins & McTighe, 2011). Transfer depends on cognitive processes. It refers to using previous knowledge in new situations. Students' prior knowledge affects their subsequent learning (National Research Council, 2000). Transfer refers to the connection between information stored in memory and information available in new situations. Transfer may happen automatically or as a result of conscious abstraction. Offering feedback helps transfer to occur (Schunk,2012).

The first stage of UbD depends on standards, enduring understandings, essential questions, and proficiency. Enduring understandings are the big ideas. They refer to concepts and processes applied in new situations. Essential questions aims to engage students in the learning situation. They have no right or wrong answer. The teacher uses essential questions to organize the lessons and encourage students to find personalized meaning to the questions. Teachers guide students' answers to the essential questions. Students explore new knowledge and skills which leads to proficiency(Wiggins & McTighe, 1998, 2005, 2011).

Tenbrink (2011) illustrates how to use UbD. The teacher should divide the standards into small objectives. Each objective should include an action verb. It should be specific, appropriate, and observable. Sadker, Sadker, and Zittleman (2011) add that the teacher should list the questions essential for achieving the learning goals. Questions reduce disciplinary

problems and keep students involved in the learning situation. Also, they help teachers stay focused on enduring understanding. Tomlinson and McTighe (2006) conclude that the teacher highlights standards and learning outcomes. The teacher shares essential questions to be covered and knowledge and skills to be learned.

To summarize, teachers identify the desired results according to the content standards. They design intended learning outcomes to be achieved by the end of each lesson. Teachers introduce the main concepts and skills. They ask different questions so that students can discuss and explore new knowledge and skills. This stage targets acquisition, understanding, and transfer of knowledge. Students acquire essential knowledge and skills. They express their acquisition through the different facets of understanding to be able to transfer their learning to new situations.

Second, identifying evidence

Teachers identify the evidence of achieving the learning goals. They develop performance tasks to reveal such evidence. Different methods of assessment, formal and informal, can be used to measure students' learning. Oral questions, observations, quizzes, tests, projects, and performance tasks can be used to check students' understanding. Teachers should increase complexity of the learning tasks gradually. Assessment tasks should be de-contextualized before being authentic (Wiggins & McTighe, 1998, 2005, 2011).

When designing assessment tasks, teachers should take into consideration different elements called GRASPS. GRASPS stands for goal, role, audience, situation, product or performance, and standards for success. UbD focuses on designing appropriate scoring rubrics for authentic assessment tasks to measure students' enduring understanding. Rubrics are helpful in performance tasks. They offer accurate description of the desired performance. Teachers offer feedback to guide students' performance.

Assessment tools should reflect the learning goals that implicitly cover the six facets of understanding. Teachers select the facets to be measured. They cannot assess the six facets during a session. Error analysis enables students to assess their answers. Students should be able to tell the right answers after identifying their errors (Jackson, 2011; Wiggins & McTighe, 1998, 2005, 2011).

Tomlinson and McTighe (2006) summarize the identifying evidence stage. The teacher explains the assessment tools to be used to check students' understanding by the end of the lesson. The teacher discusses performance tasks and their rubrics. The teacher models assessment tasks to enable students to reveal their understanding. Nitko and Brookhart (2011) state that a rubric includes some criteria. It describes different levels of the quality of performance. Rubrics are descriptive and not evaluative. Students match the performance to the description without judgement.

Danielson and Marquez (2016) discuss the four levels of content standards, to be covered in assessment. The first level, recall, depends on recalling and applying knowledge. It includes these action verbs: identify, recall, recognize, use, and measure. The second level, skill or concept, involves some mental processing. It includes these action verbs: classify, organize, estimate, and compare. The third level, strategic thinking, requires reasoning, planning, and using evidence to explain their thinking. Students draw conclusions and solve problems. The fourth level, extended thinking, needs complex reasoning and planning over an extended period of time. It includes designing and conducting experiments, making connections, and combining and synthesizing ideas.

Tenbrink (2011) adds that authentic assessment measures skills and knowledge needed in the real world. Rubrics, checklists, and portfolios are the common authentic assessment tools. They offer conditions similar to the real world situations. Rubrics describe performance in the form of a

scoring scale. They quantify students' performance and highlight its essential components. Rubrics help students reduce errors.

To conclude, the identify evidence stage focuses on the assessment of the desired results. Evidence may be gathered through formal or informal assessment. Also, evidence is revealed in summative and formative assessment. Assessment tools include tests, questionnaires, interviews, performance-based tasks. Rubrics describe students' performance in the performance tasks. Teachers design the assessment tasks to check students' understanding by the end of each lesson. Teachers identify the goals of assessment, the roles of students, the characteristics of the assessment situation, the desired performance, and standards for success.

Third, designing the learning experiences

The teacher identifies strategies, methods, techniques, and materials needed to achieve the learning goals. It depends on the enduring understanding and how to be achieved. Teachers answer three main questions: What to teach? How to teach? What is the order of teaching? They focus on targeted knowledge and skills. Teachers develop activities needed to develop enduring understanding and reveal evidence of understanding. Activities should motivate students to explore their understanding (Wiggins & McTighe, 1998, 2005, 2011).

The teacher structures a supportive learning environment to enable students construct their understanding. Teachers offer instructional support and scaffolding to maximize students' learning in the zone of proximal development (Tenbrink, 2011). The teacher can use direct instruction to inform students about the target knowledge and skills. The teacher can use demonstration, modeling, questioning, graphic organizers, guided practice, feedback, correction, and differentiation. Students construct meaning of important ideas and processes. Facilitative teaching engages students in information processing and guides their inquiry.

Reciprocal teaching, problem-based learning, and differentiated instruction help students transfer learning to new situations (Wiggins & McTighe, 2011).

Tomlinson and McTighe (2006) maintain that the teacher introduces the learning experiences in light of the desired results, essential questions, and expected performances. The teacher asks students to reflect on their learning and apply the skills and knowledge acquired to real-life situations. Wiggins and McTighe (2005) add that the stage of designing the learning experiences depends on the WHERETO principles, which stands for why, hold, equip, reflect, evaluate, tailor, and organize. Students know why they learn in a specific sequence. Teachers hold students' attention and equip them with knowledge and skills. They enable students to reflect and revise their learning. They evaluate their learning progress. Teachers tailor the learning experiences according to students' needs and interests. They organize the learning experiences to ensure students' deep understanding (Wiggins & McTighe, 2005).

In this stage, the teacher checks students' prior knowledge, skill levels, and potential misconceptions. The learning plan determines whether all the three types of goals; acquisition, understanding, and transfer ; are addressed. The learning plan reflects principles of learning and best practices. The plan should be engaging for students. The teacher monitors students' progress towards acquisition, understanding, and transfer through each lesson. The teacher identifies misunderstandings and offers feedback (Wiggins and McTighe, 2011).

In sum, the stage of designing the learning experiences focuses on the learning plan to be followed in each lesson. Teachers identify the learning experiences that cover the desired learning outcomes. Teachers use different strategies to attract students' attention. They tailor the learning experiences according to students' needs and interests. Teachers allow

students to reflect on their learning. They can self- assess their performance using different rubrics. Teachers should establish a learning environment that fosters students' acquisition, understanding, and transfer of knowledge.

McTighe and Wiggins (2005) offer a detailed description of the three stages of the UbD. The first stage covers the identification of the desired results. It includes forming content standards, course objectives, and learning outcomes. It focuses on understanding and knowledge. Enduring understanding focuses on the big ideas. The teacher forms questions that develop inquiry, understanding, and transfer of learning. Knowledge covers key knowledge and skills that students should acquire and what they will be able to do according to such knowledge and skills.

The second stage, assessment evidence, highlights the transfer of knowledge. The teacher develops the performance tasks that enable students to demonstrate their understanding. Also, the teacher determines the criteria of judging understanding. Different assessment tools are used to demonstrate achieving the desired results, such as tests, quizzes, observations, and learning logs. The teacher offers opportunities for students to reflect and self-assess their learning. The learning plan includes the learning experiences and instruction that enable students to achieve the desired results. The teacher provides opportunities for students to rethink and revise their understanding. The teacher allows students to evaluate their work. It is to be noted that the teacher personalizes teaching according to students' needs, interests, and abilities (Ibid.).

The New Education System (Education 2.0)

The Ministry of Education and Technical Education (MOE) aims to provide high quality education for all. The MOE offers educational opportunities for learners to realize their abilities and develop their skills. Learners, in turn, develop the society and compete internationally. It also

targets preparing distinguished teachers with a high level of professionalism and expertise to be able to offer a learner-centered environment and plan for change and development. It encourages the use of information and communication technology to offer students self-learning and creative thinking and life skills. The curricula should reflect community needs and encourage community participation (National Center for Educational Research & Development, 2015).

Shawki (2018) states that the new education system focuses on foundational skills of literacy, numeracy, and digital literacy. Education should be multidisciplinary to broaden students' horizons. Soft skills and competencies such as communication and critical thinking should be included in the curriculum. Learning should maintain happiness to motivate students to be lifelong learners who accept differences, and adapt to different changes. Students should also be competent in knowledge and life skills. Egypt chooses to invest in its new generations through building a transformative and modern education system consistent with international quality benchmarks.

Education 2.0 promotes a vision of learning, thinking, and innovating. Education aims to create curious learners. Students are open-minded communicators and creative innovators. They are capable of competing in national and international markets and enhancing economic and social development in Egypt. In 2018-2019, the new curriculum is administered to the early stages to be applied to the secondary stage in 2030. Then, Education 2.0 will be the only operating education system in Egypt (UNICEF MENA Education Team , 2018).

Assessment practices need to be integrated in the processes of teaching and learning. Such integration aims to emphasize the ability of students to apply knowledge and skills in different situations. Students become competent learners who are capable of searching knowledge, analyzing

information, and applying critical and creative thinking. Also, such integration highlights the use of formative assessment and avoids the concentration on the final exam as the only chance for evaluating students(UNESCO,2013).

The Education 2030 agenda maintains improving the efficiency and reliability of learning measurements. The new agenda requires efficient and accurate systems to measure multiple forms of learning across learners. Formal and informal learning are assessed. Assessment depends on generating evidence, encouraging teachers' monitoring, and highlighting the benefits of using diverse assessment tools (UNESCO Institute for Statistics, 2016).

Education 2.0 follows specific steps. First, defining the learning objectives for KG1-2 and Grade 1, articulating the core life skills adopted in the national curriculum framework. Second, developing learning content and materials in which digital content and technology-supported teaching and learning are emphasized. Third, developing the national teacher's training framework based on the new curriculum. Notably, the new education system focuses on life skills, deep learning, project-based learning, digital and paper based learning materials, and continuous assessment (UNICEF MENA Education Team, 2018).

The Ministry of Education and Technical Education issued different decrees to discuss the new education system (Education 2.0). The first article of the Decree No.343 issued in 8/9/2018 states that the new educational system is applied at the academic year 2018/2019. The sixth article of the same decree mentions that the assessment system for KG1 & KG2 is performance -based assessment. Child's individual and group behaviors are assessed through oral tasks; in addition to individual and group tasks using a color- coded performance scale. By the end of the

semester, the report is delivered to parents to illustrate a child's performance (El-Waqae Al-Masrya, 2018).

The curriculum framework divides life skills into four learning dimensions. First, *learning to live together* which includes skills for active citizenship. Respecting diversity, empathy, participation, and accountability are examples of this dimension. Second, *learning to be*, covers skills for personal empowerment; such as self-management, resilience, independence, self-confidence, effective listening, and communication. Third, *learning to do* which illustrates skills for employability; like cooperation, negotiation, decision- making, and productivity. Fourth, *learning to know*, to highlight skills for learning; such as creativity, critical thinking, and problem solving (UNICEF MENA Education Team ,2018).

The EFL text book series, *Connect*, uses various strategies to engage students in a learning journey full of fun. It includes engaging activities with friendly characters in a familiar world. The series is based on the cognitive developmental theory. Teachers support and guide children as they construct their own understanding of the world. The series is designed to support whole child development. It supports the language development of the child and satisfies their physical, cognitive, social and emotional needs. The English language text books support teachers and students to achieve the objectives of the curriculum reform of the Egyptian Vision 2030 (Evans , 2018 a).

The new English language series focuses on Values education. It refers to the teaching of values; such as tolerance, honesty, curiosity, perseverance, cooperation, and independence. These values help create good citizens. Students are introduced to simple topics on values set in a classroom context. They are shown common situations in school life, in the context of the story, and in the form of photos and songs. Teachers guide students

towards behaviors; such as curiosity, perseverance, cooperation, politeness, respect, tolerance, and increasing independence (Evans , 2018 b).

The final part of each unit in the English Language text books includes a self-assessment questionnaire. Students assess their learning of vocabulary, phonics, content, language integrated learning, and life skills. Students assess each of the previously mentioned elements by either drawing a sad or happy face. They also can color the smiley face that they choose. Therefore, the activities included in each theme combine life skills, values, issues and challenges, besides content and language integrated learning. Such activities are administered through songs, games, stories, and projects. The ultimate goal of TEFL in the new education system is to create a comprehensive, successful, learner (Evans , 2018 a; Evans , 2018 b; Wingent, 2018).

Each English language textbook includes a Games Bank at the end of the book to explain the games in the book. Students practice motor skills, vocabulary, and letter sounds in an enjoyable and active way. There is a variety of whole class, group, and pair work games. They can be adapted to suit the needs of any class. Games are an essential element of effective lessons. Games develop students' motor and cooperative skills. There is often a suggested game at the beginning or end of each lesson (Evans , 2018 a; Evans , 2018 b; Wingent, 2018).

According to Sakr (2018), the general goals of TEFL in Education 2.0 are the following. Developing students' abilities to enjoy learning, encouraging students to communicate effectively with others, and accept others. Students are expected to solve problems, appreciate artworks, respect ethics and values, and be proud their culture. Also, students are intended to be cooperative, confident, and positive. Teachers can achieve TEFL goals through the five domains of early childhood development and learning: cognitive development, social-emotional development, motor

skills, language development and communication, and finally educating the whole child.

The Relationship between UbD and Education 2.0

UbD enables teachers to become designers and overcome the obsession of textbook coverage (Wiggins & McTighe, 2011). Using UbD in TEFL ensures the use of the communicative language teaching. Also, EFL becomes a means of communication rather than an object of study. Students discuss their views in English (Dávila,2017).

EFL teachers in the new education system are instructors, managers, advisors, and personal tutors. Teachers as instructors introduce new language and decide activities to be administered. Teachers as managers organize the learning environment for the activities, which may be group or pair activities. Teachers as advisors monitor students' performance in the learning activities and offer feedback. Teachers as personal tutors identify students' difficulties and offer help (Wingent, 2018).

Yurtseven and Altun (2016 b) examined the effect of UbD on teachers' professional development and students' achievement in EFL. Participants were 10 instructors and 436 students at a state university in Turkey. Students were divided into a control group and an experimental one. Instructors were trained on UbD and were asked to design and administer UbD based units. Data collected through instructors' interviews and students' achievement tests revealed that UbD training enhanced teachers' professional development. Students' achievement scores in EFL were also developed.

Meyer (2006) concludes that the designing process of UbD supports teachers' professional development and enables them to be a team member. UbD enables EFL teachers to develop students' language learning skills (Wiggins & McTighe, 2007). It overcomes the obstacle of considering

content transfer as the ultimate goal of teaching. UbD focuses on the communicative approach in EFL sessions. It encourages students to use the English language in classes (Wiggins & McTighe, 2011).

The EFL curriculum in Education 2.0 aims to develop students' thinking skills. Teachers' target students' ability to recall information, ask questions, make decisions, solve problems, evaluate and organize information, and create their own work. Thus, students become confident, smart, and early thinkers. Content and Language Integrated Learning (CLIL) lessons included in the English textbooks use the English language as a means to learn different fields of study. The CLIL based lesson is closely related to the theme of the unit and story content in which areas such as Math, Science, Social studies, Art, and Music are integrated. The materials included are engaging and age-appropriate to attract students' attention (Wingent, 2018).

Ornstein and Hunkins (2018) summarize Wiggins and McTighe's UbD model. First, teachers identify the expected results. Such results include knowledge, skills, and values that students should reveal. Curriculum developers depend on the national content standards in forming learning objectives. Teachers identify the enduring understanding, big ideas that students should transfer to their real lives. Second, teachers focus on the evidence of students' understanding. Teachers become assessors before organizing content. They use observations, discussions, quizzes, tests, and performance tasks to assess students. Third, teachers plan learning activities and determine the materials needed. They offer content that reflects the essential knowledge and skills.

Each unit in the new English language textbook includes play time which offers extra material designed for students to work independently. The play time offers extra practice. They include coloring, tracing, writing, matching, and other fun revision activities. Every unit includes a project to

develop students' motor skills and encourage their creativity. Students share and collaborate their knowledge and skills with each other's (Evans , 2018 a; Evans , 2018 b; Wingent, 2018).

As stated above, it is clear that UbD can achieve the goals of the new education system. Education 2.0 focuses on developing students' cognitive, social, emotional, motor, and language skills. Such skills can be approached using the UbD. UbD focuses on students' knowledge, skills, and values. The cognitive and emotional domains of students are covered through the six facets of understanding: explanation, interpretation, application, shifting perspectives, empathy, and self-assessment. Performance based learning targets the development of students' motor skills. Finally, UbD uses EFL as a means of communication. It avoids the problems of content coverage and activity coverage. EFL teachers focus on the achievement of the learning objectives revealed through different means of assessment.

Research Problem

The Ministry of Education and Technical Education in Egypt launched the National Project for Developing the Education System in September 2018. The project aims to establish a distinguished education system (Ministry of Education and Technical Education, 2018). The Ministry of Education and Technical Education has not yet suggested a model of lesson planning that achieves the goals of the new education system (Discovery education, 2018). Planning enhances teachers' confidence since they focus on the special characteristics of their students (Haynes, 2007).

To the best knowledge of the researcher, there is a paucity of studies tackling the new education system. Further, the teacher's guides of the new EFL series, *Connect*, do not adopt a model for lesson planning to ensure the achievement of the learning outcomes. The researcher interviewed seven TEFL experts who maintained the need for a new model of lesson planning to achieve the goals of TEFL in Education 2.0.

The problem could be summarized as follows:

There is a need for a new model of lesson planning to achieve the goals of TEFL in Education 2.0. Hence, this research attempts to examine TEFL experts' views on a suggested UbD based lesson planning as a means to achieve the goals of the new educational system (Education 2.0).

Research Questions

This research provided an answer to the following main question:

How does the suggested UbD based lesson planning achieve the goals of
TEFL in Education 2.0?

In order to answer the main question, the following sub questions were also answered:

- 1-What are the goals of TEFL in Education 2.0 ?
- 2-Does the traditional lesson planning achieve the goals of Education 2.0?
- 3-What are the elements that should be covered in EFL lesson planning according to Education 2.0?

Research Aim

The aim of this research is three-fold. It aims at highlighting the goals of the new education system, and benefits of using UbD based lesson planning in EFL classrooms. It also explores whether UbD can achieve the goals of the new educational system (Education 2.0).

Research Significance

The significance of this research could be summarized in the following:

- 1- Highlighting the goals of TEFL in the new education system.
- 2-Providing guidelines for integrating UbD based lesson planning in EFL sessions to achieve the goals of the new education system.

Research Delimitations

Several delimitations were identified in this research:

- 1- Participants were delimited to seven TEFL experts at the Ministry of Education and Technical Education.
- 2- A lesson planning model based on UbD was investigated as a tool for achieving the goals of TEFL in the new education system.

Definition of Terms

Understanding by Design (UbD)

In this research, it refers to a model adopted for EFL lesson planning to achieve the goals of the new education system (Education 2.0). The lesson plan consists of three main components: learning outcomes, evidence, and learning experiences.

The New Education System (Education 2.0)

Education 2.0 refers to the education system that started in Egypt since September 2018 with KG1, KG2, and Primary 1. It continues until 2030 and introduces a new book series for learners, *Connect*. The *Connect* series targets EFL vocabulary, language, phonics, life skills, values, challenges, and integrated cross-curriculum topics.

Method

The research adopted the descriptive method. It depends on gathering EFL experts' views on the goals of the new educational system and appropriateness of UbD based lesson planning on achieving these goals. The descriptive method approach was adopted to offer a thorough description of the new education system applied in September 2018. Also, it was too early to test the new education system using the experimental method.

Participants

The following TEFL experts participated in this research:

- The EFL expert at the technical office of the Minister of Education and Technical Education

-
-
- The English Language consultant of the Minister of Education and Technical Education
 - The General inspector of English Language at the Ministry of education and Technical Education
 - The Head of the Foreign Language Department at The Center of Curriculum & Instructional Materials Development
 - The General inspector of English for governmental language schools at Giza governorate
 - An inspector of English for governmental language schools at Giza governorate
 - The General inspector of English for public schools at Giza governorate

Participants were selected according to their willingness to participate in a one to one interview.

Instrumentation

The Semi-structured Interview

Purpose of the interview

It aimed at gathering information on TEFL experts' views concerning the goals of the new educational system and whether UbD can achieve these goals.

Construction of the interview

The interview aimed to gather TEFL experts' views on the goals of TEFL in the new education system, the elements of lesson planning that can achieve such goals, and whether a suggested UbD based lesson planning can achieve these goals. The interview included the following questions:

1-What are the goals of TEFL in Education 2.0 ?

2-Do you think that the traditional lesson planning achieve the goals of Education 2.0? Why?

3-What are the elements that should be covered in EFL lesson planning according to Education 2.0?

4-Do you think that the suggested UbD based lesson planning model (See Appendix A) can achieve the goals of Education 2.0?

Administration of the Interview

Each participant determined the date and time of the interview at his/ her convenience. Participants were allowed to express their thoughts and feelings according to the questions with no time limit. The duration of the interview ranged between twenty to thirty minutes.

Discussion

This section depends on analyzing participants' answers to the interview questions. According to the participants' answers, the goals of TEFL in Education 2.0 could be summarized as follows: A) Developing students' values, language skills, and communication skills. B) Enabling students to express their needs using the four language skills. C) Constructing students' knowledge and exploring their potentials. D) Encouraging students to apply knowledge in different authentic situations. E) Developing students' social skills by offering them opportunities to participate in different activities based on mutual respect.

TEFL in Education 2.0 also aimed to develop students' self-esteem and enhance their abilities to understand the world they live in. TEFL targeted developing students' awareness of arts and appreciation of art works. It also aimed to increase students' awareness of environment, and develop their positive attitudes towards the environment. Solving problems and making decisions according to the scientific method were also aims of TEFL.

Participants maintained that the traditional lesson planning did not achieve the goals of Education 2.0. The traditional lesson planning consisted

of presentation, practice, and production. They believed that lesson planning should include other elements, such as reflection and assessment. They emphasized that lesson planning should focus on developing students' understanding. They suggested that lesson planning should focus on life skills, social skills, and problem solving skills. Lesson planning needed to be student-centered to enable students to be independent learners. Participants concluded that lesson planning should build students' characters through songs, activities, and projects.

After examining the proposed UbD lesson planning model, the participants maintained that some elements of UbD were covered in the traditional lesson planning. They also maintained the absence of a suggested model for lesson planning to achieve TEFL goals in Education 2.0. They offered different modifications to the suggested planning model to achieve the goals of TEFL in Education 2.0, see appendix 1.

To conclude, there is a paucity of studies describing the new education system in Egypt. Also, the teacher guides of the new textbook series do not include a model for lesson planning. Using UbD in lesson planning enables teachers to achieve the goals of TEFL. UbD is goal-oriented, teachers focus on achieving the learning goals instead of focusing on content coverage. Assessment focuses on measuring students' knowledge and skills in light of the desired learning outcomes. Students assess their answers and rethink the learning situation. Teachers have the flexibility of rearranging the learning activities to achieve the learning outcomes.

Recommendations & Suggestions for further research

1-Examining the effect of using UbD on developing students' EFL achievement.

2-Examining teachers' perceptions of UbD.

3-Investigating the effect of UbD on developing teachers' professional development.

4-Studying the effect of a UbD based training on EFL teachers' teaching practices.

References

- Ambrose, S., Bridges, W., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco: Jossey-Bass.
- Brown, J. (2004). *Making the most of understanding by design*. Virginia: Association for Supervision and Curriculum Development (ASCD).
- Center for Developing Curriculum & Instructional Materials (2012). *The general framework for pre-university education*. Retrieved October 2018 from http://moe.gov.eg/ccimd/pdf/curricula_pre-university.pdf
- Childre ,A., Sands ,J., A., & Pope , S.(2009)Designing challenging curriculum: Backward Design . *Teaching exceptional children*, 41 (5),6-14. Retrieved May 2018from <https://www.cec.sped.org/~media/Files/Policy/IDEA/IDEA40/TEACHING%20Exceptional%20Children2009Childre614.pdf>
- Cho, J. & Trent, A. (2005). Backward curriculum design and assessment: What goes around comes around. *The Journal of Culture and Education*, 9 (2), 105-122. Retrieved August 2019 from <https://files.eric.ed.gov/fulltext/EJ795704.pdf>
- Danielson , C.& Marquez, E.(2016). *Performance tasks and rubrics for high school mathematics: Meeting rigorous standards and assessments* (2nd ed.). New York: Taylor & Francis
- Dávila ,A. (2017). Wiggins, G., & McTighe, J. (2005) Understanding by design (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development ASCD. *Colombian Applied Linguistics Journal*, 19(1), pp. 140-142. <http://dx.doi.org/10.14483/calj.v19n1.11490>

El-Waqae Al-Masrya (2018). *Decree No.343* issued in 8/9/2018. Egypt: Amiri Printing Press.

Evans, S.(2018 a). *Connect KG1. Teacher's Guide*. Egypt: Ministry of Education and Technical Education.

Evans, S.(2018 b). *Connect KG1. Teacher's Guide*. Egypt: Ministry of Education and Technical Education.

Fullan, M. (2005). *Leadership and sustainability: System thinkers in action*. Thousand. California: Sage Publications.

Harris, J., & Hofer, M. (2009). Instructional planning activity types as vehicles for curriculum-based TPACK development. In C. D. Maddux (Ed.), *Research highlights in technology and teacher education* (pp. 99–108). Virginia: Society for Information Technology in Teacher Education (SITE).

Haynes, A.(2007). *100 ideas for lesson planning*. New York: Continuum International Publishing Group

Jackson, R.(2011). *How to plan rigorous instruction*. Virginia: Association for Supervision and Curriculum Development (ASCD).

Kelting-Gibson, L. (2005). Comparison of curriculum development practices. *Education Research Quarterly*, 29(1), 26–36. Retrieved June 2018 from <https://files.eric.ed.gov/fulltext/EJ718116.pdf>

Lemov, D.(2010). *Teach like a champion:49 techniques that put students on the path to college*. San Francisco: Jossey-Bass.

Linder , K., Cooper , F., McKenzie, E., Raesch , M., & Reeve, P.(2014). *Intentional teaching, intentional scholarship: Applying backward design principles in a*

faculty writing group. *Innovation High Education* , 39,217-229
[http://dx.doi.org/
10.1007/s10755-013-9273-0](http://dx.doi.org/10.1007/s10755-013-9273-0)

Marzano, R., & Waters, T. (2009). *District leadership that works: Striking the right Balance*. Bloomington: Solution Tree Press.

McTighe, J., & Seif, E. (2000). *Indicators of teaching for understanding*. Retrieved April 14, 2018, from <http://www.ubdexchange.org/resources/news-articles/article4.html>

McTighe, J. & Seif , E. (2003). Teaching for meaning and understanding: A summary of underlying theory and research. *Pennsylvania Educational Leadership*, 24(1), 6-14.

Megahed , N.(2016). *Quality education for all in Egypt: Post 2015 education development goal*. Retrieved September 2018 from [http://schools.aucegypt.edu/GSE/Documents/Megahed%20Education%20Quality%20Post%202015%20CERS%20Report%202016%20\(1\).pdf](http://schools.aucegypt.edu/GSE/Documents/Megahed%20Education%20Quality%20Post%202015%20CERS%20Report%202016%20(1).pdf)

Meyer, C. (2006). *Learning to teach conceptually: Four preservice teachers' journeys* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3249962).

Michael, N. & Libarkin, J. (2016). Understanding by Design: Mentored implementation of backward design. *Journal of College Biology Teaching*, 42(2), 44-52. Retrieved August 2019 from <https://files.eric.ed.gov/fulltext/EJ1126353.pdf>

Ministry of Education. (2007). *National strategic plan for pre-university education reform in Egypt*. Egypt: Egyptian Ministry of Education.

Ministry of Education and Technical Education (2018). *The periodical book No.9*. Egypt.

Molina , W.(2013).Teachers' views of backwards planning in a suburban

elementary school in Hawaii(Doctoral dissertation). Retrieved from ProQuest

Dissertations and Theses database. (UMI No. 3605187).

National Research Council (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.

Nitko, J. & Brookhart, M. (2011). *Educational assessment of students* (6th ed.).

Boston: Pearson.

Ornstein, A., Hunkins, F.(2018).Curriculum: Foundations, principles, and issues

(7 th ed.).London: Pearson Education Limited.

Reynolds , H. & Kearns , K.(2017).A planning tool for incorporating backward

design, active learning, and authentic assessment in the college classroom. *CollegeTeaching*,65 (1), 17–27.

<http://dx.doi.org/10.1080/87567555.2016.1222575>

Richards, J.(2013).Curriculum approaches in language teaching: Forward, central,

and backward design. *RELC Journal*, 44(1) 5–33. <http://dx.doi.org/10.1177/0033688212473293> rel.sagepub.com

Sadker, D., Sadker,M.,& Zittleman,K.(2011). Questioning skills. In J. Cooper

(Ed.), *Classroom teaching skills* (9th ed.) (pp. 107-152).Canada: Wadsworth

Cengage learning

Sakr, A.(2018). *Longman nationwide summer training program*. Egypt: Egyptian

International Publishing Co.

Schunk, D.(2012). *Learning theories: An educational perspective*(6th ed.).

New York: Pearson.

Seel, N., Lehmann, T., Blumschein,P. ,and Podolskiy, O.(2017). *Instructional*

design for learning: Theoretical foundation. Netherlands: Sense Publishers.

Shawki (2018).A Word from the Minister of Education and Technical Education.

In S. Evans (p.iv). *Connect 1.* Egypt : Ministry of Education & Vocational Education.

Stronge, J., Tucker, P., & Hindman, J.(2004).Handbook for qualities of effective teachers. Virginia: Association for Supervision and Curriculum Development (ASCD).

Tenbrink, T.(2011).Assessment. In J. Cooper (Ed.), *Classroom teaching skills* (9th ed.) (pp.21-44).Canada: Wadsworth Cengage learning.

Trapani, B.(2016). *Efficacy of Understanding by Design implementation plan: Evaluated through teacher perceptions and practices* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10040940).

Tomlinson, C. & McTighe, J.(2006). *Integrating differentiated instruction & understanding by design: Connecting content and kids.* Virginia: Association for Supervision and Curriculum Development (ASCD).

UNICEF MENA Education Team (June 2018). *Life Skills and Citizenship Education Initiative.* Retrieved August 2018 from http://www.lsce-mena.org/uploads/updated_lsce_files/2018-06/180628_LSCE_Egypt_pamphlet_4P_Web.pdf

Weimer, M. (2013). *Learner-centered teaching: Five key changes to practice.* San Francisco: Jossey-Bass.

Wiggins, G. & McTighe, J. (2008). Put understanding first. *ASCD: Educational Leadership*, 65, (8), 36-41.Retrieved May 2018 from

<https://eric.ed.gov/?id=EJ796365>

- Wiggins, G., & McTighe, J.(2007). *Schooling by design: Mission, action, and achievement*. Virginia: Association for Supervision and Curriculum Development (ASCD).
- Wiggins, G., & McTighe, J.(2011). *Understanding by design to create high-quality units*. Virginia: Association for Supervision and Curriculum Development (ASCD).
- Wiggins, G., & McTighe, J.(2005). *Understanding by Design* (2nd ed.). Virginia: Association for Supervision and Curriculum Development (ASCD).
- Wiggins, G., & McTighe, J. (1998). *Understanding by Design*. New Jersey: Merrill Prentice Hall.
- Wiggins, G., & McTighe, J. (2006). *Understanding by Design: A framework for effecting curricular development and assessment*. (2nd ed.). Virginia: Association for Supervision and Curriculum Development (ASCD).
- Wiggins, G., & McTighe, J.(2011). *The understanding by design guide to advanced concepts in creating and reviewing units*. Virginia: Association for Supervision and Curriculum Development (ASCD).
- World Bank. (2000). *Egypt: Country assistance evaluation*. World Bank Document. Retrieved September 2018 from <http://documents.worldbank.org/curated/en/848881468744318476/Egypt-Country-assistance-evaluation>
- Young, S.(2005). *Understanding by Design: An action plan for implementation*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3168051).
- Yurtseven, N., & Altun, S. (2016 a). Understanding by Design (UbD) in EFL teaching: Teachers' professional development and students' achievement. *Educational Sciences: Theory & Practice*, 17, 437–461.<http://dx.doi.org/10.12738/estp.2017.2.0226>

Yurtseven, N. & Altun, S.(2016 b). Understanding by Design (UbD) in EFL teaching: The investigation of students' foreign language learning motivation and views. *Journal of Education and Training Studies*, 4 (3), 51-62, doi:10.11114/jets.v4i3.1204

Appendix A

UbD based Planning Model

Stage 1—Identify Desired Results
-Facets of understanding -Key knowledge and skills -Learning outcomes
Stage 2—Determine Acceptable Evidence
-Tools of assessment , such as Performance tasks, projects, tests, quizzes, prompts, and work samples - Student Self-Assessment and Reflection
Stage 3—Plan Learning Experiences
-What to teach? -How to teach?