

# THE TEACHING FOR UNDERSTANDING GUIDE PDF, EPUB, EBOOK



Tina Blythe | 144 pages | 14 Nov 1997 | John Wiley & Sons Inc | 9780787909932 | English | New York, United States

## **Book Review: The Teaching for Understanding Guide () – Professional Learning International**

Morocco notes four cross-cutting findings of these studies: In each of the REACH studies, teaching for understanding included aspects of both curriculum design and delivery of instructional units. Curriculum unit design is linked to several guiding principles of instruction for teaching for

understanding. These principles reflect a convergence of social, cognitive, and special education research around how understanding develops. They include the following: Authentic tasks Instruction designed around authentic tasks helps students become fully engaged in learning and developing an understanding of content. Authentic tasks have three key characteristics. First, they engage students in constructing knowledge by integrating preexisting knowledge with new information. Activities that promote such integration include formulating questions, seeking information, and synthesizing information.

Second, the tasks employed should be tailored to each content area to help students understand major ideas. Finally, the tasks should have real-life relevance and provide a basis for understanding issues and problems encountered outside of school. Opportunities to build cognitive strategies Strategies for upper elementary and middle school students range from more basic skills such as organizing materials and correcting spelling to higher level skills like editing the content of a class paper for coherence, breaking down a math problem into its elements, and writing persuasively. It is possible to teach cognitive strategies either through explicit instruction or by modeling and encouraging use of these strategies within a subject area. Learning that is socially mediated Learning and understanding are enhanced when students are able to interact constructively with one another in building and integrating new knowledge. Morocco suggests several ways that teachers can support socially mediated learning: a ensure shared ownership of the learning activity; b encourage students to make their thinking visible to each other through visual representations or dramatization; and c select problems and materials that allow for a range of perspectives.

Engagement in constructive conversation Students can best engage in constructive conversation when they are able to express their own ideas and questions and listen to and integrate the perspectives of others into their own thinking. Figure 1 presents a template for the design of a curriculum unit that reflects these four principles. A unit is organized around a set of overarching goals related to understanding particular ideas and concepts in a subject area. These goals might encompass several months of work. The unit addresses these large goals through a specific unit topic and unit-specific goals related to that topic. These activities engage students in learning with one another and participating in conversations that encourage them to express ideas, pose questions, and synthesize information. Individual support practices make the activities accessible for students with a range of abilities and individual learning needs.

One frequent source of support is instruction in the ways of thinking and learning cognitive strategies that are important within a content domain. Assessments take two forms see the bottom left of Figure 1 : ongoing assessments of student understanding that guide the teacher in further modifying the instruction, and a culminating assessment activity that enables the student to demonstrate his or her understanding of the major skills, strategies, and concepts emphasized in the unit.

These assessments are themselves authentic tasks that require students to express their understanding of important ideas in the unit. One example of a curriculum unit designed around this structure is a middle school social studies unit on the topic of immigration to the United States in the late 19th and early 20th centuries MacArthur, et al. Students were asked to investigate the experience of one of two immigrant groups: Chinese or Eastern European Jews.

An overarching goal of this and earlier units was to help students understand some of the causes and consequences of immigration. Instructional opportunities included working together in heterogeneous groups to study and interpret information about the immigrant and nativist viewpoints on immigration nativists were Americans who opposed immigration between and , often for economic reasons. For the most part, materials that students investigated were excerpted from authentic primary sources that historians use in their investigations, including diaries, drawings, and photographs. Students found the schema useful for comparing and contrasting differing viewpoints about immigration. Each lesson provided teachers and students with opportunities for ongoing assessment.

One culminating assessment strategy was a debate about the desirability of immigration in this period of American history. Students were placed in cooperative teams to represent the immigrant or nativist viewpoint. To provide all students with access to the debate, the unit included a planning sheet that prompted students to generate reasons on both sides of the debate and to think of supporting arguments. Curriculum units based on this design were selected or developed for REACH investigations of inclusive instruction in mathematics, science, and language arts, as well as social studies.

Providing multiple instructional opportunities ensures that students can use a variety of approaches to understanding complex ideas. In addition to considering individual support practices within this unit design, teachers take into account district goals and align the unit to district and state standards. The view that active learning promotes understanding is shared by the Research Institute on Secondary Education Reform for Youth with Disabilities RISER , which has published a set of criteria and indicators for identifying schools that are models of authentic and inclusive teaching and learning. These criteria and indicators are based on the work of Newmann, Secada, and Wehlage regarding successful school restructuring. The RISER indicators related to learning experiences can be seen as exemplars of the four research-based principles described by Morocco Table 1. Within this framework, the first step is to identify generative topics central to the subject matter, and then to organize curriculum around those topics.

Generative topics are those that are considered central or important to understanding the field; can be related to present-day experiences or events; can provide a basis for progressing to the next level of instruction or understanding; are intrinsically interesting to the students and teacher; represent recurring themes in the field; and can be approached at several levels of complexity. Examples of generative topics include: The second step is to develop explicit understanding goals that relate clearly to the ideas and questions that form the basis of a content area. Explicit understanding goals are key to developing appropriate assessments of student learning.

Third, students are engaged in performances of understanding in which they demonstrate their ability to apply their knowledge and understanding in new settings or situations. Fourth, there is ongoing assessment of student performances in order to measure understanding and provide the information teachers and administrators need to improve planning and instruction. Such assessments are most helpful educationally when they are frequent, use clear and public criteria related to the understanding goals, involve both students and teachers as evaluators, and result in constructive suggestions for improvement. Teaching for understanding promotes in-depth learning over covering a broad range of material, and applying

knowledge to real-world problems over performance on short-answer quizzes. This is most likely to occur in schools that view themselves as communities of learners. It can be time consuming, and it requires teachers to present material in nontraditional ways that engage active participation from students with a wide range of learning styles and learning abilities.

Ultimately, the result is well worth the effort: Students truly learn and are able to take that learning with them and use it as they make the transition into adult life. Baxter, J. We talk about it, but do they get it? *Learning Disabilities Research and Practice*, 17(3), Blythe, T. Understanding understanding. Blythe Ed. San Francisco: Jossey-Bass. Brandt, R. On teaching for understanding: A conversation with Howard Gardner [Electronic version].

Educational Leadership, 50(7). Cutter, J. Supporting inclusion through case-based vignette conversations. Feretti, R. Teaching for historical understanding in inclusive classrooms. This page includes articles, books, videos, and resources about Understanding by Design. These posters can be used to help identify the types of thinking you hope students will engage with during a lesson or unit. You can print them out and use them as a documentation tool around your classroom. This official page of the TLU PZ project includes an overview of the research, books, and helpful articles and tools. Teaching for Understanding. Teaching for. The three features to look for in topics that teach for understanding: central to the discipline, accessible to students, and connects to diverse topics inside and outside the discipline. It's important to identify the understanding goals for a topic.

## Teaching for Understanding Framework in Practice

Many instructors have realized the sheer power of harnessing the most accessible and comfortable format for students. Some instructors, upon giving out a number for texting, start hearing regularly from students who have rarely if ever made contact previously. Some instructors have set up a Google Voice account to use for texting with students. Texts can be routed directly to your Gmail account and you can respond to them on any device you wish. I have a separate work text number that I give to all my students to use. Throughout the week, I send random short messages of praise or encouragement to select students, reminding them that I am truly an advocate for their success. You can collect this information using a Google form, for example. Note preferences where you can access them efficiently, a student roster spreadsheet, for example, and use them when you contact your students.

Many online courses also have discussion activities in which students post comments in an asynchronous discussion board within the LMS. Some of these discussion activities are very simple such as providing an objective response, whereas others include providing carefully-written responses that demonstrate mastery of complex concepts. Many students see discussion boards as a hoop to jump through to earn points. Take care not to be too involved. It is not necessary to reply to each post, but be mindful of responding to every student regularly. Any individual feedback for students should be made in the grade book feature of the LMS and kept private.

This tends to keep the discussion going and build in higher level thinking skills that meet their level of growth. From the golden days of MySpace to the explosion of Facebook, teachers continually explore new methods to interact, engage, and communicate with their students that seem most comfortable to them.

As fast as these modes of communication are changing, so are novel ways for using them. Understanding that this generation is driven by social media, I created a private YouTube and Facebook page that I share with my students only. Online instructors can influence student engagement and bring back enthusiasm for learning or inspire it for the first time. This can be the best way to engage students in their own learning process and build intrinsic motivation to continue to grow in the subject. Think back to the aura of excitement during the first day of the school year. Quiet students often share their voices more in an online culture because they feel comfortable and not like the spotlight is on them. I typically individualize this motivation in my personal feedback and emails and use bitmojis to add a little fun and excitement.

Motivation is an emotion or desire within a person that causes the person to take action. People will usually take action for one primary reason: to achieve a goal. People motivate themselves; we are not able to motivate others. However, as teachers and online facilitators, we can influence motivation through the learning environment we create.

We can encourage and support students and contribute to their motivation through tangible extrinsic rewards for a job well done or more personal intrinsic rewards that will propel a student to push forward and succeed. In the field of brain-based research, studies show that providing a learning environment that is safe—where students feel comfortable taking risks and sharing their thoughts—promotes learning. Instead, I focus on the things that I can control and be myself. I can show them how excited the content makes me and find engaging ways to deliver the content while providing an open mind to their questions and choices to prove their understanding. If I am too rigid, I will quickly lose them—and that is the kiss of death in an online classroom. You are an educator, so by the very nature of your profession, you want to help others succeed.

Assessment is a powerful tool to support student growth and promote success in an online environment. Online classes allow for many different ways to assess students. They are not only tested on their expressive skills with special assignments where they create a script and sign it but also a midterm and final where they must put together all the materials and use all the skills they have learned throughout the course. I use discussion boards, quizzes, and practice assignments to formatively assess how the students are doing and pinpoint areas for further instruction. One thing that many online instructors appreciate about the online format is that they are freed up from daily lesson planning and content delivery because the courses often already contain those elements. Instead, they can spend their time and energy individually coaching each student. This coaching role is manifested in the activities surrounding grading and feedback.

Students need much more support and feedback in the online environment than in a traditional course. This is because students may feel alienated in the virtual classroom and they are still getting used to learning outside the face-to-face classroom experience. Using effective feedback strategies will enable the instructor to identify and meet individual student needs as well as encourage students to participate and continue to participate at a high level. How can we stimulate our online learners to be actively engaged in class throughout the academic term? Beyond an enthusiastic warm

welcome letter, interesting and helpful announcements, and encouraging participation in class discussions, grading and feedback can effectively result in students feeling motivated. The acronym REPLY is a practical way to organize the key components of quality online feedback on assignments and assessments. Instructors should establish, publicize, and maintain expectations for grading and providing feedback for student assignment submissions.

Timely feedback is critical because students may have forgotten what they submitted if the feedback takes too long. Timely feedback also allows the student to incorporate that feedback into future work in the course. At best, an instructor reflects back to students a realistic picture of their progress. Therefore, feedback should be very specific. If your course incorporates the use of rubrics, use them to assess the students work. Feedback should not be merely corrective. Always acknowledge when the student is making an effort and what the student is doing well so that they continue with those behaviors.

Make sure you maintain a positive tone throughout your writing. Read and reread your comments to assure that a positive tone is maintained, even if the nature of your feedback may be primarily corrective. Expand the learning opportunity for students. Point out a few suggestions for improving the assignment. Fill in any perceived gaps in student understanding. Make your feedback positive, helpful, and memorable by focusing on a limited number of attainable improvements for the student to consider. Provide an opportunity for growth by allowing students to learn from your feedback and try the assignment again. Remember, an environment in which students feel safe to try alleviates the highly motivational fear of failure. The goal is for students to master the content, not simply move on in the course.

Personal feedback helps you build a relationship with each student. Students who feel you care about them and their success are more likely to be successful. Use greetings and closings. Use their name. It makes the students feel valued and communicates that you are speaking specifically to them, not using a canned response. R Responsive—Provide a timely response to student questions.

P Positive—Use words that give off a positive connotation. L Learning—Include suggestions for how the assignment can be improved. Y You—Make it personal and not just a standard response. If I was in the face-to-face classroom, I would be walking around and supporting students by answering questions and guiding their work. Then they have the option of redoing their work for a final grade within a designated time frame. Much of your instructional tasks are reactive, such as answering emails and grading assignments.

However, the skilled teacher will be proactive, reaching out to students when instructor contact can be helpful and taking time to celebrate student achievement. Consider making a quick phone call or email each week to encourage one or two students who have done an outstanding job on their coursework, have shown sound character, or who have made solid steps to improve their progress. Or highlight excellent student work each week in an announcement and display the example for other students to see so that they have a good model. Such tasks do not take long, yet they may yield great results in terms of encouraging students to continue their focus and stay on pace. Many students know that if they are struggling, a teacher will reach out to help. However, most students are not expecting a phone call or email from a teacher when they are doing something well. I find that praising students for a job well done is just as important as reaching out to the struggling students for help; therefore, I try to recognize the good work and efforts of at least three students each week.

While grading student work, you may find that students are missing some key knowledge or skills needed to succeed in a lesson. Perhaps they are missing essential prior knowledge, there is an academic integrity issue, or they seem to have some real difficulties in navigating the online course. Pick up the phone or open your email and reach out to the mentor and student. When I provide feedback, I encourage my students to respond back, even if it is a short message confirming they received my message. If I do not hear back within two days, I find an alternative way to communicate my message to the students to ensure that they received my feedback and answer any questions they have.

This also shows the students that I am committed to helping them succeed and builds trust in our relationship. Schedule regular time during your week to look for students who may be behind or skipping lots of assignments. Reach out to them. Document that you reached out, and schedule a follow-up call in a week to see if they have progressed. Contact their mentors to alert them to your action and enlist their support. They may be aware of extenuating circumstances the students have not shared, too.

While the one-size-fits-all approach is still prevalent in many educational settings and may be what most students experience, online options can be very personalized, and there are many technology enhancements that assist students in learning. Michigan schools are obligated to address the learning needs of students of all abilities so everyone has equitable access to education. When students have the tools to learn according to their abilities, everyone wins. By learning more about accommodations, accessibility, and inclusive pedagogy, educators can apply best practices in meeting the needs of all students in their classrooms. Even though most student-centered educators truly believe that all students can learn, they are quick to add the caveat that all students do not learn at the same pace, time, or in the same manner.

The entire gamut of online learners will arrive within your online classes, from gifted and talented learners to those with severe learning disabilities. Understanding the struggles of those with disabilities or extreme challenges can be a life altering paradigm shift in terms of how we apply our knowledge and instructional strategies to assist them. Accommodation: makes the work accessible, but does not substantially change the work, e.

Modification: the subject matter is changed by being significantly below grade level or changing what the test measures. Differentiation: planning instruction based on individual student interests, needs, and abilities to include students with disabilities, gifted, etc. The instructor may, for example, provide real-life problems, create a new assignment, focus on visuals, use current events, create movies, review games, or use flashcards as instructional strategies. IEPs are identified by the school district or mentor in my online program. When I use one of these noted accommodations, I make sure to note this with a date and short description of the accommodation in my worksheet to keep accurate records for future reference.

Great teachers share some commonalities in how they approach teaching. They continually refine their teaching craft, devote energy and effort to their approach, and reflect on how to make a lesson better and more accessible the next time. Great teachers also present content in a variety of ways to enhance student learning and make the lesson come alive using authentic and meaningful techniques.

They may use videos, personal stories and storyboards, songs, or even art to enhance the content and appeal to a variety of student learning preferences. When teaching struggling learners, you may want to begin with step number one below and take the individual learner through a specific learning process for success. Keep in mind that the intended outcome is small steps of success, not giant leaps of learning.

**Universal Design for Learning** When differentiating instruction online, one of the frameworks to use is that of the Universal Design for Learning. It helps the instructor meet students where they are. Here are the key concepts for applying UDL in your learning environment. I often help my students beyond the content by creating videos with Jing. This allows students to hear my voice AND see the concept taught in a different format, and I can go at a pace that is appropriate for that individual.

Many struggling learners lack the prerequisite knowledge required to be successful in the course in which they are enrolled. Particularly by high school, many struggling students have been passed on without attaining even a proficient level of understanding of key concepts and learning building blocks required for success. Practical instructional strategies used by online instructors to help struggling students: write clear directions, provide examples, create an assignment checklist with the pacing guide, use rubrics to clarify, make the learning relevant to the individual student, provide alternative options to meet the desired goal, provide instruction using multiple modalities, e. Use the learners preferred communication method such as: texting, email, phone. An online teaching experience may require a fuller understanding of the variety of culturally diverse students you may provide instruction to online as well as the educational settings and expectations of the learning experience and environment of their native culture.

You may encounter students who are new to the U. Not only are they adapting to a new language, but a new way of life and societal norms as well. Build a relationship with these students, respect them, provide opportunities for them to practice their new behaviors, and use guided feedback as they become acclimated to online learning. Annie Shibata, Ph.

Students in the online environment will be learning new skills as they are learning course content. Be prepared for challenges related to self-regulation, time management, accountability, and communication. The move from face-to-face to online learning requires a lot of adjustment for students. Consider having all students write an introduction to you. As we have seen, learning preferences and culture have a number of variables involved. Example : a. Online students may feel anonymous given the fact that they cannot see you and you cannot see them. Their appropriate behavior online will need to be guided in this new environment to maximize the learning potential of all students and provide everyone a safe environment. This is particularly evident when it comes to communicating with their teachers and other students via email, text, and discussion boards. Helping your online students realize that the expectation of appropriate behavior in the online classroom is no different than in a brick-and-mortar schoolroom needs to be presented deliberately.

There are certain behaviors that are expected of everyone within the confines of that classroom including the interaction with instructors and their peers. Because this is a new experience for online learners, they need guidance and support to develop their own Four Ps of communication and feedback to learn how to be personal, polite, positive, and professional.

You can find many samples of netiquette guidelines on the internet. Some teachers ask that their students sign and return guidelines to pledge themselves to following them. Fair Use is permitted under certain conditions when your use contributes to society. See the resource box on this page to learn the four factors of Fair Use. This job aid provides a quick reference specifically for teachers regarding copyright and Fair Use. Copyright and Fair Use Guidelines for Teachers. When in doubt of a copyright infringement, ask the owner of the work for permission. Use Public Domain resources whenever possible. Also, provide the appropriate attribution to the work such as pictures you may use online. Creative Commons provides easy to use licenses to reuse materials. Check out royalty-free images to use in online courses. Many quick reference guides for properly citing your sources are available online. Provide several to your students or create your own based on your favorite resources and post it in your course resources area in your course LMS.

Typically, students do not get a lot of instruction about plagiarism and the consequences. Many people suspect the online environment is rife with cheating and plagiarism. Post your expectations for original and cited work in your course and provide guidelines or online sources students can use as a reference. Contact mentors if you need support with particular students or assignments. In my follow-up feedback, I ask the student specific questions that would expand on their work to check for true understanding of the material. This almost always clarifies whether plagiarism is a factor in the completed assignment. Proctored assessments can be set up to help verify who is taking an exam. This solution takes coordination on the part of the student, mentor, and instructor. If possible, where the course design provides a test bank of questions which can be randomly selected for each test taker or the order of the questions can be rearranged, take advantage of those options to help maintain the integrity of the assessment.

If you suspect that someone else may be taking an assessment for your online student, then set up a mutually agreeable time in which you can conduct a verbal assessment with the student to validate your concerns. Quality Matters QM is the global organization leading quality assurance in online and innovative digital teaching and learning environments. It is important that courses are aligned to state or national standards to ensure that students earn appropriate credit towards meeting their academic goals e. The report provides school districts with the opportunity to benchmark their own virtual learning programs against their peers in the state.

The report is organized into several sections. The first section looks at schools as the unit of analysis. The next section focuses on the virtual courses taken. The third section focuses on students. The fourth section captures performance on statewide assessments. There is also a brief section containing maps of virtual use. Each section is meant to capture the essential findings without being overly data intensive; however, data tables have been included in the appendices to provide those interested with more in-depth information. For additional information and insights for developing and supporting your online and blended learning program, please visit the following web pages on the Michigan Virtual website.:

Whether you are a teacher, mentor, parent, student, counselor, administrator, school board member, or someone else who has an interest in online learning, we welcome your feedback and questions and invite you to email us at [email protected]. While we are no longer accepting new

enrollments for these courses at this time, many courses continue to remain open for enrollment. Because every course we offer is taught by a Michigan-certified teacher, this high volume of enrollments has created capacity issues for our teachers who provide each and every student with individual feedback. As a result, we are taking steps to hire even more part-and full-time teachers to support larger numbers of student enrollments for Semester 2 as well as for Trimester 2 and 3. For schools that still need online learning options this year, please fill out the form at the bottom of our virtual pathways page to meet with someone to discuss other solutions.

We also have free course content and resources available for you to use. We never want to turn away a student who wants to learn from us. Our top concern, however, is student success, and we have a policy to not take on additional enrollments if we cannot guarantee that all students will have a quality online learning experience. We appreciate your patience and understanding as we navigate the unusually high volume of enrollments we are receiving.

Teacher Guide to Online Learning. Table of Contents. Acknowledgements The Teacher Guide to Online Learning would not have been possible without the guidance and valuable contributions from many experienced and dedicated professionals in the field of K online learning. You are an expert in your field. You build relationships with students and create a learning community. You evaluate student performance through written assignments and assessments. You seek to connect classroom lessons with the real world. Students will contact you individually. You develop relationships in a different way. There are more opportunities for individualization.

Students will communicate with you and work on their courses at all hours. Students may begin the course at different times of the calendar year and not progress through the course all together at the same time, depending on the online learning program model. Students may have greater discretion concerning the order in which they complete their lessons so may skip around in online content and need to be redirected to go back and complete tasks, depending on the online learning program model.

You may not physically see your students. Unless you use video conferencing, for example, communication will be primarily via email, the learning management system LMS message system, graded feedback, phone, texting, etc. Because of the input from real teachers, with examples from their own studies and classroom practice, The Teaching for Understanding Guide is able to illustrate the process of choosing an engaging topic and connecting it to others, setting clear attainment goals, creating classroom engagements that help develop and demonstrate understanding, and finally creating a stage for feedback that is continuous and constructive.

This is a book that grew out of an extensive research project from some of the most well-known names in education. In her book, Tina Blythe, a familiar name to anyone that has worked with Harvard Project Zero, explains the approach described in Teaching for Understanding: Linking Research with Practice. The Teaching for Understanding Guide is a companion that demonstrates the four elements of the Teaching for Understanding Framework.

It is a practical guide, based on classroom examples that make it easy to understand and relate to. The first few chapters give the reader an overview of how to use the book and a refresher on what understanding in the educational sense is. The next few chapters focus on the four main elements of the process by using case studies to illustrate each process. Each chapter is supported by personal perspective notes that offer reflections from teachers, administrators and students. Often there are also explanation notes, that highlight an idea offered through a case study or provide extra information about a concept. At the end of each chapter, the author provides a reflection section that could be used to help you get started using the ideas supplied in the book. As the book is not lengthy, it is easy to access. Also, because of the way it is organized, it could easily be used in sections to support a school moving towards this way of teaching or to support a teacher in developing their own professional development in any of the areas described in the book.

First Name. Last Name. Sign Up. You may unsubscribe via the link found at the bottom of every email. See our Email Privacy Policy for details. Emails are serviced by Constant Contact. Skip to main content. Using classroom examples from science, mathematics, language arts and social sciences, and reflecting the input of practicing teachers, the workbook shows how teachers can: Choose topics that engage student interest and connect readily to other subjects.

Set coherent unit and course goals. Create activities that develop and demonstrate students' understanding. Improve student performance by providing continual feedback.

## **Performances of Understanding - The Classroom Inquiry Cycle: An Online Tutorial**

When students learn a sport, a craft, various arts, and most learning outside of the school, they learn by engaging in complex performances. The Teaching for Understanding framework argues that engaging in complex performances should have the same value in formal learning in terms of fostering understanding. A person may first learn how to ride a bicycle by reading instructions or watching other bike-riders in action. Perkins and Blythe claimed that in order to foster an outcome of understanding, students must be engaged in performances that show understanding. There are three progressive categories of Performances of Understanding: the initial introductory performances, the guided inquiry, and the culminating performances.

The introductory performances include varied entry points, analogies, and multiple presentations of core ideas. A useful strategy is to foster a thinking culture that makes thinking a habit. By the end of the unit, students should be required to work more independently than they did in the initial performances and guided inquiries, and to synthesize the understandings that they have developed throughout the unit. The culminating performance could be an exhibition of the final products, report presentations, extended essays, and so forth.

Performances of Understanding should be challenging yet accessible to students. Good Performances of Understanding would provide evidence for assessments. Ongoing Assessments How can we tell what students understand? Perkins emphasized the importance of involving students in the process of defining criteria and constructing rubrics for the understanding performances they have to demonstrate. Students will likely be more

motivated to meet assessment criteria that have been shared among and shaped by the class. Moreover, the co-construction of the criteria is stronger because of wider participation. It is not to say that all settings of learning should be totally democratic. Educators can always add things to the rubric that students might not think of, while having some forms of a democratic process for the instructor should not be the only person who controls the evaluation of performances.

Ongoing Assessment should include peer- and self-assessment. Peer- and self-assessment are important to help students self-regulate their learning. Another key concept of Ongoing Assessments is that the assessment could be formal with grading or informal without grading as long as the instructors can gain the insight and trace the cognitive processes of how learners learn. They argued that learning in a reflective learning community can support dialogue and reflection based on shared goals and a common language. To immerse students in collaborative communities would expose them to diverse perspectives thus promoting respect, reciprocity, and collaboration among members.

Qualities of Understanding In considering the quality of understanding, Mansilla and Gardner suggested four dimensions and four levels of understanding. The four dimensions of understanding were knowledge dimension, method dimension, purpose dimension, and form dimension. For example, students learning to solve a 3D geometry problem often find it difficult to imagine the third invisible dimension. The use of 3D dynamic geometry software can show all sides of the 3D graph to students and make learning 3D geometry much easier. Moreover, technology integration allows the Teaching for Understanding framework to be applied to distance education. For example, online resources, such as libraries of lesson plans, can provide ideas for designing Generative Topics; online educational projects such as WebQuests can engage students and their instructors in collaborative inquiry and social action initiatives; web-based multimedia presentation tools can enrich Performances of Understanding by enabling teamwork between students and allowing the combination of multiple forms of expression in conveying ideas; and the statistical feature of a learning management system LMS can help make the progressive results of Ongoing Assessments more accessible to the instructors.

Overall, technology can help to strengthen Teaching for Understanding in Practice The Teaching for Understanding framework is like a map that shows you big things Perkins, b. Teachers can organize the nuances of their own practices around those big things while focusing on more important ideas. Since most teachers are surrounded by students, textbooks, tests, and administrative works, it is difficult for teachers to make time for reflection and innovation.

Therefore, teachers learning to use the Teaching for Understanding framework can benefit from collegial exchange and supportive coaching. While reading this section as reference, it is important to remember that there is no fixed starting point or sequence for planning a curriculum using the Teaching for Understanding framework. Teachers should work dynamically or even cyclically among the elements. For example, articulating Understanding Goals helps to verify the essence of a Generative Topic. Analyzing Performances of Understanding may reveal the flaws of Understanding Goals. Defining Ongoing Assessment criteria may lead to a refinement of Understanding Goals. The Teaching for Understanding framework lacks details that may be needed in applying the framework to real tasks. Teachers must bridge the gap between the general principles and the particular situations as well as add personal ingredients to fit their own teaching styles and contexts.

In this section, the author will first propose methods for conducting each of the four elements The following description is presented as a linear process; however, in practice, the process should be dynamic and iterative. The following paragraphs suggest some techniques and tools for unit planning using the Teaching for Understanding framework. Some of the tasks could be very trivial. It can help you work more effectively if all analysis results and design thoughts are put on paper. Appendix A provides a sample organizer for unit planning using the Teaching for Understanding framework. Creating a Generative topic A practical way of designing a Generative Topic can start from brain storming in which the teachers or curriculum designers participate in a face-to-face meeting or online discussion forum.

To begin, participants can suggest or post important concepts, skills, processes, standards, or uses that they think are relevant to the discipline or content area The second step involves using lines to connect related standards, concepts, skills, processes, and uses in order to create a knowledge web. Finally, the participants should look into the knowledge web to find the spot that has most connections and nodes. That spot is the one containing the thickest knowledge and is the place from which the Generative Topics should be generated Blythe, Some instructors might insist that anything can be a generative topic if good teaching is involved.

However, Perkins and Blythe argue that some topics are more central to the discipline, more Often there are particular topics that have to be taught in a curriculum and those topics are not always interesting. In such cases, Perkins and Blythe suggest adding a theme or a perspective to make the topics more interesting, for example, teaching Romeo and Juliet as an exploration of the generation gap or teaching about the food chain to illustrate that all living things are connected. The nodes that are linked to many other nodes are often the most valuable goals for understanding. Other than the statement form, Understanding Goals may be stated in question form. The question format can help students understand the goals easily and be able to participate in the co-construction of Understanding Goals.

In addition to sharing with students, instructors are encouraged to share Understanding Goals with parents and colleagues. Developing Performances of Understanding Many instructors have concerns regarding their teaching practices. They spend a lot of time improving their teaching techniques or following teaching tips in order to be good performers in the classroom. Performances of Understanding refer to what students do, rather than what the instructors do. An assumption of the Framework is that deep learning will not occur simply by listening to a lecture or reading the course materials.

Rather, engaging activities are required to ensure that students will use their higher level thinking skills to relate, synthesize, evaluate, and apply what they have learned. It is not to say that lectures are not useful. After students have gained an initial understanding of the topics, lectures might be able to speed up the learning cycle Perkins, Teaching with good activities is not something new. Many instructors teach using engaging activities; however, these activities do not always involve performances of understanding. Perkins and Blythe argue that a Jeopardy-style history quiz, an art activity of drawing the Boston Tea Party, or a follow-the-recipe-style science experiment are all engaging activities, but they are not Performances of Understanding because the activities do not push learners to think beyond what they already know.



Another type of mistaken examples related to the activities that engage students in Performances of Understanding but they might lack the focus provided by Understanding Goals. Appendix B lists the The next two paragraphs suggest two approaches for designing Performances of Understanding. Varied entry points Multiple intelligences theory Gardner, suggests that every learner has a different intelligence profile and, as such, individuals do not all learn in the same way. Gardner suggested that any rich, nourishing topic can be introduced in at least seven ways see Figure 2, which roughly map onto the multiple intelligences: 1 narrational entry point, 2 logical entry point, 3 quantitative entry point, 4 foundational entry point, 5 aesthetic approach, 6 experiential approach, and 7 collaborative approach. Good Performances of Understanding aim directly at developing understanding of one or more Understanding Goals and are sequenced to guide learners through different entry points.

In addition, good Performances of Understanding provide a range of evidences for Ongoing Assessments. The Visible Thinking project at Project Zero and other research projects have developed many strategies for fostering thinking routines that are widely adopted, e. Thinking routines stimulate not only individual thinking but also social interaction through which the new knowledge can be Figure 2: Developing disciplinary understanding requires delicate considerations on what dimensions to cover and which entry points to utilize. Designing Ongoing Assessments Fair and valid assessments cannot be obtained through paper-and-pencil assessments that require higher levels of linguistic and logical-mathematical intelligences. To learn for understanding, assessments need to occur frequently within and combined with the instruction Andrade, There are two useful tools for designing Ongoing Assessments. The first tool is the assessment funnel, developed by Hetland, in that it synthesizes all key concerns regarding Ongoing Assessment in one single diagram See Appendix C.

The second tool is the following six-step process, developed by Andrade, for co-constructing useful rubrics with students and instructors: 1 Look at models; 2 List criteria; 3 Pack and Unpack criteria; 4 Articulate levels of quality; 5 Create a draft Ladder of Feedback When students are engaged in learning activities, they need appropriate feedback to help them to perform better. The Ladder of Feedback involves the use of the following sequence when providing feedback: 1. Ask questions about unclear points or missing details. Highlight the strengths of the work. Tell students what they have done well and what makes it good. Offer concerns. Express disagreement with some part of the work or identify potential problems or challenges. Provide suggestions on the concerns mentioned above. The emerging technologies such as Web 2. To ensure that learners acquire requisite skills and The table below presents an initial proposition for integrating emerging technology into the Teaching for Understanding framework for use in an online setting.

OA Negotiating criteria with Interactive, Online rubric creating tools, e. How to take advantage of new technology, along with the corresponding implications, to advance the efficiency and effectiveness in applying the Teaching for Understanding framework to web-based learning is a topic that worth further exploration. Conclusion The world of education is full of advice Perkins, Educators learned all kinds of frameworks, strategies, approaches, techniques, and tools from books, articles, and lectures.

Such advice need to be taken into practice in order to know their applicability and usefulness. Through years of practice, the Teaching for Understanding framework has showed its validity in supporting daily teaching for understanding in terms of curriculums, activities, and assessments. Factual knowledge will only accumulate into understanding that equips learners to perform their knowledge in real problems through instructional strategies that foster understanding outcomes. The TfU Graphic Organizer. Curriculum Design Tools: Planner. Using Rubrics to Promote Thinking and Learning. Educational Leadership, 57 5. Black, P. Assessment for Learning: Putting it into Practice 1st ed. New York: Open University Press. Blythe, T. The Teaching for Understanding Guide 1st ed. Bransford, J. National Academies Press.

Basic Books. Hetland, L. Mixing it Up in the Assessment Funnel. Laurillard, D. Rethinking University Teaching: A framework for the effective use of learning technologies 2nd ed. New York, NY: Routledge. Mansilla, V. What are the Qualities of Understanding? Stone Wiske Ed. Teaching for Understanding: Linking Research with Practice 1st ed. Perkins, D.

What is Understanding? This official page of the TfU PZ project includes an overview of the research, books, and helpful articles and tools. Teaching for Understanding. Teaching for. The three features to look for in topics that teach for understanding: central to the discipline, accessible to students, and connects to diverse topics inside and outside the discipline. It's important to identify the understanding goals for a topic. Consider using the interactive understanding map on the Cultures of Thinking page. To learn for understanding, students need criteria, feedback, and opportunities for reflection from the beginning of and throughout any sequence of instruction.

Teachers need to design understanding performances that support the understanding goals, and that students should be engaged in performances that demonstrate understanding from the beginning to the end of the unit or course.

### **ERIC - ED - The Teaching for Understanding Guide. The Jossey-Bass Education Series.,**

Performances of understanding are tasks, activities, assignments through which students demonstrate and develop their understanding of important knowledge and skills. Instructors have their own ideas about what constitutes understanding in their disciplines and what performances of understanding provide the most compelling evidence about students' understanding. Nonetheless, good performances of understanding. Relate directly to understanding goals Develop and apply understanding through practice Engage multiple learning styles and forms of expression Promote reflective engagement in challenging, approachable tasks Demonstrate understanding—means of monitoring, publicizing and learning from students' understanding.

Understanding develops. Sometimes it develops quickly, but development may be slow going and halting if concepts are particularly difficult. Instructors can use a sequence of understanding performances to support students' development and to make their thinking visible. Each performance serves a different function. Culminating performance — demonstrated mastery of designated understanding goals; synthesize other understanding.

Welcome 1. Teaching for Understanding. Teaching for. The three features to look for in topics that teach for understanding: central to the discipline, accessible to students, and connects to diverse topics inside and outside the discipline. It's important to identify the understanding goals

for a topic. Consider using the interactive understanding map on the Cultures of Thinking page. Assessments take two forms see the bottom left of Figure 1 : ongoing assessments of student understanding that guide the teacher in further modifying the instruction, and a culminating assessment activity that enables the student to demonstrate his or her understanding of the major skills, strategies, and concepts emphasized in the unit. These assessments are themselves authentic tasks that require students to express their understanding of important ideas in the unit. One example of a curriculum unit designed around this structure is a middle school social studies unit on the topic of immigration to the United States in the late 19th and early 20th centuries MacArthur, et al.

Students were asked to investigate the experience of one of two immigrant groups: Chinese or Eastern European Jews. An overarching goal of this and earlier units was to help students understand some of the causes and consequences of immigration. Instructional opportunities included working together in heterogeneous groups to study and interpret information about the immigrant and nativist viewpoints on immigration. Nativists were Americans who opposed immigration between and , often for economic reasons. For the most part, materials that students investigated were excerpted from authentic primary sources that historians use in their investigations, including diaries, drawings, and photographs.

Students found the schema useful for comparing and contrasting differing viewpoints about immigration. Each lesson provided teachers and students with opportunities for ongoing assessment. One culminating assessment strategy was a debate about the desirability of immigration in this period of American history. Students were placed in cooperative teams to represent the immigrant or nativist viewpoint. To provide all students with access to the debate, the unit included a planning sheet that prompted students to generate reasons on both sides of the debate and to think of supporting arguments.

Curriculum units based on this design were selected or developed for REACH investigations of inclusive instruction in mathematics, science, and language arts, as well as social studies. Providing multiple instructional opportunities ensures that students can use a variety of approaches to understanding complex ideas. In addition to considering individual support practices within this unit design, teachers take into account district goals and align the unit to district and state standards. The view that active learning promotes understanding is shared by the Research Institute on Secondary Education Reform for Youth with Disabilities RISER , which has published a set of criteria and indicators for identifying schools that are models of authentic and inclusive teaching and learning.

These criteria and indicators are based on the work of Newmann, Secada, and Wehlage regarding successful school restructuring. The RISER indicators related to learning experiences can be seen as exemplars of the four research-based principles described by Morocco Table 1. Within this framework, the first step is to identify generative topics central to the subject matter, and then to organize curriculum around those topics. Generative topics are those that are considered central or important to understanding the field; can be related to present-day experiences or events; can provide a basis for progressing to the next level of instruction or understanding; are intrinsically interesting to the students and teacher; represent recurring themes in the field; and can be approached at several levels of complexity.

Examples of generative topics include: The second step is to develop explicit understanding goals that relate clearly to the ideas and questions that form the basis of a content area. Explicit understanding goals are key to developing appropriate assessments of student learning. Third, students are engaged in performances of understanding in which they demonstrate their ability to apply their knowledge and understanding in new settings or situations. Fourth, there is ongoing assessment of student performances in order to measure understanding and provide the information teachers and administrators need to improve planning and instruction. Such assessments are most helpful educationally when they are frequent, use clear and public criteria related to the understanding goals, involve both students and teachers as evaluators, and result in constructive suggestions for improvement.

Teaching for understanding promotes in-depth learning over covering a broad range of material, and applying knowledge to real-world problems over performance on short-answer quizzes. This is most likely to occur in schools that view themselves as communities of learners. It can be time consuming, and it requires teachers to present material in nontraditional ways that engage active participation from students with a wide range of learning styles and learning abilities.

Ultimately, the result is well worth the effort: Students truly learn and are able to take that learning with them and use it as they make the transition into adult life. Baxter, J. We talk about it, but do they get it? *Learning Disabilities Research and Practice*, 17 3 , Blythe, T. Understanding understanding. Blythe Ed. San Francisco: Jossey-Bass. Brandt, R. On teaching for understanding: A conversation with Howard Gardner [Electronic version]. *Educational Leadership*, 50 7. Cutter, J. Supporting inclusion through case-based vignette conversations. Ferretti, R. Teaching for historical understanding in inclusive classrooms. *Learning Disability Quarterly*, 24,

[The Very Hungry Caterpillar \(Big Board Book\)](#)

[Crewel Creatures : Fresh Ideas for Jacobean Embroidery](#)

[The Archive of Magic: the Film Wizardry of Fantastic Beasts: The Crimes of Grindelwald](#)

[The New Nordic](#)

[The Elements of Style Illustrated](#)

[Fortunes Children : The Fall of the House of Vanderbilt](#)