

"The point of school is not to get good at school but to effectively parlay what we learned in school in other learning and in life."

- Grant Wiggins, co-founder of UbD

Understanding by Design® (UbD®) is an internationally renowned curriculum planning framework, co-created by Jay McTighe and Grant Wiggins. The two key ideas of UbD are contained in its title:

1) focus on developing and deepening students' understanding of "big ideas" and key processes so that students are equipped to transfer their learning, and 2) design the curriculum "backward" from those ends. Transfer Goals are a fundamental element of the UbD framework.

In this paper, I'll explore the following key questions to help you better understand and make use of Transfer Goals:

- O What are Transfer Goals?
- O Why are Transfer Goals important?
- O How are Transfer Goals identified or developed?
- O How can teachers use Transfer Goals as they develop and teach specific curriculum units?
- O What do Transfer Goals mean for assessment?

### What are Transfer Goals?

Simply put, transfer, refers to the ability to apply one's learning to a new situation beyond the particulars of how it was learned. Transfer is about independent performance in context—when you can apply your learning without someone telling you what to do and when to do it. The ability to transfer requires strategic thinking and habits of mind, not simply "plugging in" facts or skills learned in a rote fashion. More specifically, Transfer Goals identify what we want students to be able *to do with* their learning when they encounter new information, issues, problems, and unpredictable circumstances after graduation.

As used in UbD, Transfer Goals have specific characteristics; they:

- are *long-term* in nature, developing and deepening over time. Think of them as exit outcomes at the end of PreK-12 schooling.
- o are *performance based*, requiring application and strategic thinking, not simply recall.
- require *independent* performance. Once they graduate, learners should be prepared to apply their learning autonomously, without waiting to be told what to do or needing extensive scaffolding.

Long-term Transfer Goals can be identified from within the academic disciplines as well as from outside of traditional subject area boundaries. Here are some examples of each type:

# **Discipline-specific Transfer Goals**

### **English Language Arts**

Write and speak to communicate effectively in various genres and media forms for a variety of audiences and purpose.

#### **Mathematics**

Apply sound mathematical reasoning to construct, justify and defend viable arguments and respectfully critique the reasoning of others.

#### Science

Conduct a sound investigation to answer an empirical question.

### **History**

Use knowledge of patterns of history to gain perspective about the present and prepare for the future.

#### **Economics**

Make sound and ethical financial decisions.

### **Health and Physical Education**

Make decisions and take actions that support life-long health and wellness.

### **World Language**

Effectively communicate with varied audiences and for varied purposes while displaying appropriate cultural understanding.

# **Transdisciplinary Transfer Goals**

### **Critical Thinking**

Think carefully about information and claims by remaining skeptical, asking questions, and evaluating the quality reasons and evidence.

### Collaboration

Work effectively with, and learn from, others in a variety of situations, in school and beyond.

#### Research

Locate pertinent information from varied sources (print, on-line; primary, secondary).

# **Empathy**

Seek to understand others who may seem different by withholding judgement and trying to imagine things from their perspective.

## Why are Transfer Goals important?

Educators are preparing today's learners for a world that is increasingly complex, interconnected, ever-changing and unpredictable. Success in life will require more than simply the ability to remember information. A modern education should prepare students to independently apply their learning to the varied opportunities and challenges they will encounter as they navigate the world beyond school.

In the context of Understanding by Design, Transfer Goals serve several purposes:

- 1. Since long-term transfer goals are exit outcomes, they provide the end points from which a PreK-12 curriculum should be planned. This approach to backward design—beginning with end in mind—leads to greater curriculum coherence since the Transfer Goals serve as a "north star" to keep teaching on course and remind all teachers to stay focused on the same long-term destination. Accordingly, the Transfer Goals serve as anchors for a vertically aligned curriculum by providing the intellectual throughlines needed to connect learning from grade-to-grade and course-to-course.
- 2. The transfer goals become a way of focusing and prioritizing the curriculum. Noted educational researcher, Dr. Robert Marzano concluded that, "a guaranteed and viable curriculum is the most significant school [and district] level factor impacting student achievement." His choice of the term, *viable*, reflects a recognized challenge—there is typically too much content listed in standards documents and not enough time to teach them all well. The result of trying to "cover" all of the listed grade-level standards can result in superficial and disconnected learning. A small number of long-term transfer goals provide a means of prioritizing the curriculum. Teachers are encouraged to focus on these long-term performance goals to avoid "getting lost in the weeds," trying to teach and assess hundreds of discrete objectives in isolation.
- 3. Transfer Goals also serve a motivational purpose by helping to answer an often-heard questions from students: Why are we learning this? How will I ever use this? Like the

game in athletics or the play in theater, Transfer Goals specify authentic uses of learning, thus conferring greater relevance and purpose to schooling.

The transference of learning can be thought of along a continuum; i.e., there is "near" transfer in which a student applies their learning to a very similar situation to how it was learned. An example would be a young student applying addition and subtraction, initially using coins, and then "transferring" the operations to marbles. A "mid-range" transfer would be evident when a student learning about gravitational rate recognizes that the rate of an object dropped from a tall tower would be calculated in the same way as the same object dropped into a deep well. Transfer can also be "far" in cases where a student applies a concept or process to a significantly different or novel context, including one that may cut across disciplinary boundaries. Here are two examples of "far" transfer:

- 1. Conceptual Transfer A student who has learned about symbiotic relationships in nature can explain how the same concept can be applied when analyzing industrial supply chains.
- 2. Process Transfer A student who understands that argumentation involves key elements—claims, reasons, evidence, and rebuttal—can make use of that structure when developing or critiquing arguments in politics, science, economics, and other domains.

The fundamental goal in Understanding by Design—teaching for understanding and transfer—will be realized when learners become increasingly able to transfer their learning to increasingly novel contexts.

### How are Transfer Goals identified or developed?

The fact that there is a Transfer Goal box at the top of the Understanding by Design (UbD) unit planning template 2.0 is likely to suggest that each individual teacher should create their own Transfer Goal(s) for every unit they teach. Instead, UbD recommends that long-term disciplinary and trans-disciplinary Transfer Goals be identified by school or district curriculum teams, consisting of representatives from all levels or school divisions. Once adopted, these goals become the end points for an understanding-based curriculum.

Here are common questions raised by educators as they begin this process:

*Is there a recommended source where can Transfer Goals can be found?* 

For the disciplines, start by reviewing the *opening pages* of standards documents for the various subjects since the larger purposes and long-term outcomes are often stated in that front matter. I also recommend looking at standards documents from other locales with the recognition that the key performance outcomes of Science or World Languages are generally similar across states and nations. Thus, you can often find well-worded goal statements in these various sources.

Transdisciplinary Transfer Goals may already be identified in your educational Mission. Also, many schools and districts now have a Profile of a Graduate that identifies key competencies needed by graduates for success in the wider world beyond the school; e.g., critical thinking or entrepreneurship. These are Transfer Goals.

How many Transfer Goals should be identified?

While there in no magic number, keep in mind that a major goal in identifying long-term Transfer Goals is to focus teaching and learning toward a small number of the most important outcomes. If there are too many, their prioritizing function will be undercut. As a very general guide, I recommend 2 to 4 per discipline, and 5–8 transdisciplinary goals.

I teach primary grades or a beginning course in a World Language. My students cannot possibly reach these lofty Transfer Goals?

While it is understandable to have these concerns, keep in mind that Transfer Goals are *long-term* in nature. It is not expected that a very young child or a beginner learning a new language will be highly proficient at the start. However, think about athletic coaches who work with beginners. They start where the novice players are and build the basics from the ground up—but they always have the "game" in mind! In other words, think of your job as developing the foundational knowledge and basic skills that later teachers will build upon, so that students will systematically grow, over time, in their abilities to transfer their learning.

What should I do if I work in a school or district that has not yet identified long-term Transfer Goals?

In this case, ask yourself: What do I want my students to be able to do with their learning by the end of the school year? Think of specific and worthy performances associated with the content you are teaching. Your answer(s) will serve as your Transfer Goal(s) for Stage 1 of UbD and guide development of the associated performance tasks in Stage 2. Then, plan your instruction backward from those to build the requisite knowledge, skills and understandings that your students will need to apply their learning (Stage 3).

# How can teachers use Transfer Goals as they develop and teach specific curriculum units?

To answer the question, consider a sports analogy: Think of the Transfer Goals as representing the "games" that we want students to be able to play well. Each game is unique and requires the players to *apply* what they have learned in practice to an authentic performance on the field or the court. Teachers then think and act like athletic coaches—

using their lessons (like practices) to develop the knowledge, skills and understandings needed for the "game."

Once identified at the district or school level, the intention in UbD is for teachers to be mindful of one or more of these Transfer Goals as they plan and teach the specific content and skills in their units. It is important to recognize that the cultivation of long-term transfer capacities requires instruction that systematically develops students' abilities to perform independently through a gradual reduction of direction by the teacher and an increase in the responsibility of the learner—by design. For example, within a grade level or course, the beginning of the year assignments and performance tasks are more likely to closely resemble the context in which they were taught. At the start, teachers will likely provide more direct instruction, modeling, and guided learning, with less time for independent application. However, over the course of the year, the assignments, performance tasks and projects should become increasingly more complex, authentic, and novel relative to the instruction. There will be a greater emphasis on independent inquiry and application by learners, with less direction by the teacher.

#### What do Transfer Goals mean for assessment?

Since Transfer Goals identify what students should *be able to do* with their learning, the most appropriate evidence of transfer will be obtained through performance assessments that call for application. Accordingly, teachers should include developmentally appropriate performance tasks as part of their unit assessments (Stage 2) as a means of gauging students' capacity to transfer their learning. As students progress across the grades, we would expect to see the performance assessments become increasingly complex and authentic, reflecting real-world situations.

#### Conclusion

Since a quote by UbD cofounder, Grant Wiggins, opened this paper, it is appropriate that we return to Grant for closing thoughts.

"Arguably transfer is the aim of any education. Given that there is too much for anyone to learn; given that unpredictability is inevitable; given that being flexible and adaptive with one's repertoire is key to any future success, it stands to reason that we should focus our 'backward-design' efforts on the goal of transfer, regardless of what and who we teach."

By systematically working to develop students' capacity for autonomous performance in this way—always with the long-term Transfer Goals in mind—school graduates are more likely to be truly ready for college and careers.

#### For More Information

**Books** 

Wiggins, G. and McTighe, J. (2011). *The understanding by design guide to creating high quality units.* Alexandria, VA: ASCD.

McTighe, J. and Silver, H. (2020). *Teaching for deeper learning: Tools to engage students in meaning making*. Alexandria, VA: ASCD.

Blog posts by Grant Wiggins What is transfer?

https://www.authenticeducation.org/ae bigideas/article.lasso?artid=60

Transfer as the Point of Education

https://grantwiggins.wordpress.com/2012/01/11/transfer-as-the-point-of-education/

A series of articles on Transfer

https://www.learningscientists.org/blog/2016/6/12/weekly-digest-14

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