The Point Of School Isn't To Become Good At School

by **Grant Wiggins**

Ed note: On May 26, 2015, Grant Wiggins passed away. Grant was tremendously influential on TeachThought's approach to education, and we were lucky enough for him to contribute his content to our site. Thankfully his company, Authentic Education, is carrying on and extending the work that Grant developed.

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 (and in spite of pressures to merely 'cover content' – which ironically inhibits transfer and *worsens* test scores, as I discuss below and in the next post).

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.

This notion is now front and center in the latest *Understanding by Design* (UbD) book, *Creating High-Quality Units*. The new Template highlights transfer goals since "understanding" surely implies, among other things "effective use of content." And we have worked hard to help readers and users of UbD understand that the TMA troika is their complex obligation: *transfer* of learning, *meaning*-making, and content acquisition.

Learning stuff is not the goal, it's the means.

See also **What Is The Purpose Of School?**

Furthermore, if you ask people to identify their long-term

goals for the year or their career, they almost always identify transfer goals: read widely and deeply, independently; relate current affairs to history and become involved civically; solve all kinds of non-routine problems in and beyond math, etc. Great!

But... few teachers plan, teach, and assesses as if this were the case. Most teachers' long-term goals are not reflected in the sum total of their assignments and assessments – and that's why UbD remains needed. The overwhelming reality, in even the best schools, is that your task as a student is by and large to learn stuff and be tested on whether you learned it.

In this post, I want to go back to basics and remind readers of what transfer is and isn't as a goal. In my next post, I want to look at various released test items that plainly reveal that the most challenging test items demand transfer, not recall. And in my third post, I will discuss a few key impediments to effectively teaching and assessing for transfer that we must remove, how we might begin to do so, and share some tools and tips for how to achieve better results.

Definition of Transfer

Let's begin with a simple overview of transfer from the first paragraph of the most helpful summary on the subject: Chapter 3 on 'Learning and Transfer' from the book *How*

People Learn from the National Academy of Sciences (available for free here). Here is how **transfer of learning** is defined and justified as a goal:

[Transfer is] the ability to extend what has been learned in one context to new contexts. Educators hope that students will transfer learning from one problem to another within a course, from one year in school to another, between school and home, and from school to workplace. Assumptions about transfer accompany the belief that it is better to broadly "educate" people than simply "train" them to perform particular tasks.

Note, then, a key term in the definition: *context*. And what this really means is *contexts*. You have not really learned something well unless you can extend or apply in a new context (framing of the task, audience, purpose, setting, etc.) what you learned in one context. You cannot just give me back what I taught you in a task that is framed just like the teaching tasks and the way I taught it and you practiced it. In the famous phrase in math, it can't just be a 'plug and chug' prompt. There is a further implication in the definition that needs to be explicit: I can only be said to have transferred my learning if I did it *autonomously*, without much teacher reminders and guidance.

I often use the example of soccer in workshops to illustrate the point. As a coach, I often created drills for helping

players learn to ‘create space’ on offense. But soccer is not the sum of the drills: can you now – on your own, in a sport with no scripts – apply those drills in the context of a fluid and novel game situation? Can you now ‘see’ when to use which of the skills we practiced – without my telling you what to do at every turn? That’s my aim as a coach and yours as a player.

John Wooden famously and paradoxically said that his aim as a coach was to be surprised by what his players did in a game. A player who has been so well educated and challenged can innovate, and often must, to win. The same thing is arguably true in all academic subjects.

The definition of transfer as the ability to handle novelty is consistent with what Bloom said about application in the Taxonomy:

Applying of appropriate abstraction without having to be prompted as to which abstraction is correct or without having to be shown how to use it in that situation.” [1]

“If the situations…are to involve application as we are defining it here, then they must either be situations new to the student or situations containing new elements as compared to the situation in which the abstraction was learned….. Ideally we are seeking a problem which will test the extent to which an individual has learned to apply the

abstraction in a practical way.... *Problems which themselves contain clues as to how they should be solved would not test application*." [2]

Many teachers just expect transfer to happen if content is well-taught. No research supports this view.

Students who have not been taught for transfer overwhelmingly respond as follows to a 'novel' but do-able challenge: *We didn't cover this; I don't know what to do*. In David Perkins' famous example, it is like the Physics student in college who complained that, while all the problems studied in class involved shooting cannons into the air, the exam question that involved dropping cannonballs down shafts was unfair because "we never studied any hole problems."

That achieving transfer is far more difficult than we grasp or care to acknowledge is also clear from soccer. A true story about a former player of mine, in a game. When I yelled out to her to apply what we had been learning all week she yelled back in the game: "But the other team isn't lining up the way we did the drills!!"

Indeed.

Yet this humorous anecdote has a serious consequence: even well-taught students don't transfer their learning very

well. **Many students do poorly on high-stakes tests because they don't see that an unfamiliar-looking test question is related to something they learned.**

In effect, whether in soccer, mathematics or US history, the learners have to be able to see on their own in this 'new' task how past learning applies – without the past learning being explicitly prompted. And, in more challenging transfer tasks, they are thus going to need some creative insight as well as flexibility in adapting prior learning to a very unfamiliar-looking unscaffolded task.

Confronting Students With 'Novel' Tasks

Note, then, that the key idea in aiming for and (especially) assessing for transfer is that the student has to successfully confront a "novel" challenge before we should conclude that they *really* got it. What "novel" means here is: an unfamiliar-looking task (as framed) that nonetheless should be doable by the student – if they really learned the related content with understanding.

Here's a simple example: if I teach the 5-paragraph essay, I should be sure to 'test' student understanding of the genre by asking them to read and write a 4 or 7 paragraph essay. But as the now-famous item from the MCAS English test in Massachusetts a few years ago revealed, when students were asked to classify a 17-paragraph piece of writing, only

31% correctly said 'essay' from the choices – and reported to newspaper reporters that it "couldn't be an essay because it didn't have 5 paragraphs.

A vital lesson flows from this issue of novelty. Just because a teacher-designed challenge is hands-on and educationally worthy doesn't mean that it requires much independent application of prior learning. If the task is familiar and the work is scaffolded, little transfer of learning is required.

So, the typical hands-on project – done for all the right reasons – does not assess for transfer if the student:

1) gets help all along the way in completing the project

2) the work is highly contextualized

3) little demand is typically made whereby the student must draw general and transferable lessons from the doing of this and other projects.

In fact, since such projects are usually so teacher-scaffolded and highly specific they may well *inhibit* later transfer of the same abilities and ideas in question! *I grew flowers, but we didn't 'cover' herbs, so...*

Here's the other irony, addressed **in another post**: transfer is precisely what a challenging multiple-choice test question demands of the learner. Learners have to handle questions

that look different from the ones they studied – with no hints or ability to question the teacher. **The most difficult tests questions involve transferable ideas and processes, not obscure facts.**

Most 'test prep' is thus an utter failure because it conflates the *format* with the *rigor*: teachers wrongly focus on practicing the test format (using low-level and familiar items) instead of practicing the test goal where the harder questions require transfer of learning.

In the next installment, I want to analyze released test items that make very concrete and clear how educators often misunderstand tests and thus proper preparation for them; and unintentionally undercut transfer, with unfortunate outcomes.

This post was originally published on Grant's blog; The Point Of School Isn't To Get Good At School: Transfer As The Goal Of Education