

How TOCfE is different from other teaching methods and techniques?

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What is the difference between “teaching” and “learning”? Yes, there is sender/receiver difference, i.e. “teaching” is the act to provide knowledge or skill and “learning” is the act to acquire knowledge? Is this the only difference? What is the criterion for we can say we “acquired” knowledge or skill?

After involved in TOC for education for some years, I was invited to TOCfE headquarter for lead facilitator training and discussed this topic with Kathy Suerken, CEO of TOCfE. We first needed to clarify the meaning of “learning”. Among lots of definitions we found from various dictionaries for “learning”, one we liked is “the modification of behavior through practice, training, or experience” (Random House Kernerman Webster’s College Dictionary). In this definition, just knowing something does not mean we “learned” something, but the learning must associate with a change in behavior.

Let me share 3 examples.

Example 1: A student gains knowledge on how to do multiplication in a classroom. This is an example of curriculum contents. This knowledge becomes “learning”, for example when s/he needs to know a number of chairs that are aligned in a triangular room, only after s/he starts to count the number of chairs row-wise and column-wise and multiplies those numbers instead of counting the chairs one by one.

Example 2: A student takes exams and finds that s/he almost missed the full credit due to his/her careless reading on a problem sentence even though s/he knew the correct answer. This is an example of life knowledge you gain. This kind of “I could have/I should have” situation becomes “learning” only after s/he starts to have habit of reexamining the meaning of a problem sentence before handing in the exam next time. In other words, as long as they repeat the same careless mistake, there is no learning even though s/he got a lesson from a past exam.

Example 3: Learning is not limited to students at school. An adult gains knowledge that bad multi-tasking lowers our productivity. This becomes “learning” only after s/he

starts freezing/quitting some activities they do now and focuses on the rest.

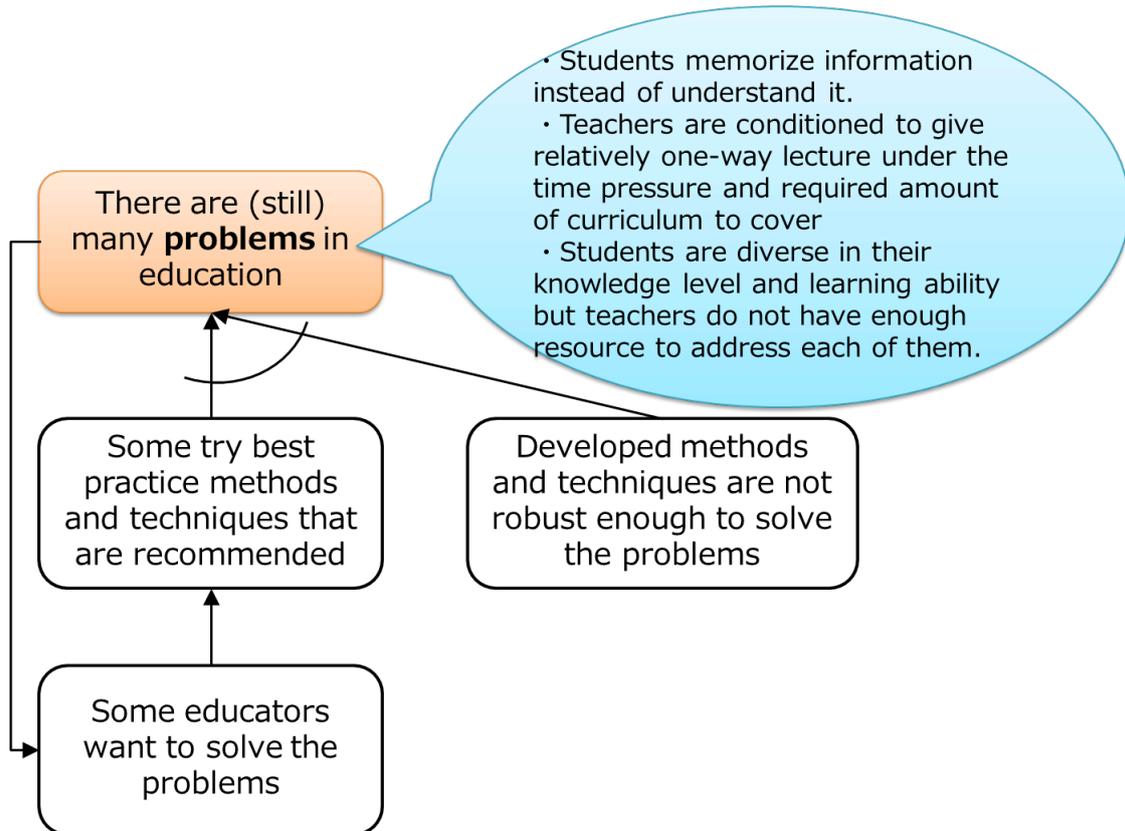
It is not very difficult for teachers to impart knowledge or skill to others, let's call them "students" in broad sense. Any math teachers can impart math knowledge and can show skill to solve math problems. However, students do not always completely understand what teachers impart; Even though students think they understand it, majority of such students do not get full score in exams. Even though students memorize knowledge or skill, not many of them do not apply what they got in their life. There is a large gap between imparting knowledge of skill and modifying behavior as a result of acquiring new knowledge or skill.

What would be an action some teachers might take when they are not satisfied with students' learning performance? We know that there are lots of limitations set by government for teachers. Still, some teachers may look for a better way to impart knowledge. Many cases, this includes dividing teaching materials into finer and finer sub-topics and creating what they think better imparting technique for each of topics. What an effort! Why they do that? My assumption based on some conversations with teachers is the following; teachers feel they are too powerless to change/challenge education system, but still strive to do their best for their students. Such teachers assume that "If we use more robust way of imparting knowledge, students learn faster and better".

Is this assumption true? Let's face the reality. Words from teachers include:

- Students memorize information instead of understand it.
- Teachers are conditioned to give relatively one-way lecture under the time pressure and required amount of curriculum to cover.
- Students are diverse in their knowledge level and learning ability but teachers do not have enough resource to address each of them.

Apparently, regardless of a number of teaching methods and techniques developed and efforts spent for them, none of them are robust enough to solve the problems listed above. This vicious cycle is given below.



Due to this systemic flaw, both teachers and students suffer. I once had a conversation with an elemental school teacher, who seemed to be passionate in their profession and seemed to be spending lot of time to study teaching materials in order to give “better” lecture for his students. Yet, what surprised me when we discussed a goal of education as an elementary school teacher, he said “I only hope that none of our students are free from caught by policeman in future. But I feel that some them might be...”. This must not be a result of a teacher with great mind.

TOCfE claims that we solve those problems by using the 3 tools and has been spread to 5 continents and more than 20 countries. What is the fundamental difference from other teaching methods and techniques? An analysis done by four directors in TOCfE Japan concluded that TOCfE assumes that “If we use more robust way of modifying behavior, students learn faster and better”. One of two TOCfE core materials “Behavior” directly addresses it. The other material “Curriculum” is also designed so that learners actually use what they learned in classroom in everyday life, thus changing learner’s thinking process and thus behavior. A fundamental difference may be that conventional methods focuses on “teachers”, while TOCfE focused on “learners”.

There is one more thing, which is discovered by accident and is related to the interpretation of “teachers”. “Change in behavior” is wanted not only by teachers, but business person who has subordinates, fathers and mothers. This claim is supported by a rapid increase in TOCfE Japan community, where many of participants are interested in TOCfE as parents or as business person. Actually, the rapid expansion of the community happened by accident. A director in Japan stretched the interpretation of “teachers” from “school teachers” to “any person who teach” without exactly knowing what it causes.

Summary

Learning is not about gaining knowledge, but making change in behavior as a result of acquiring knowledge.

The author assumes that TOCfE teaching methods and techniques are developed by focusing on “learners” to make changes in behavior, while many other methods and techniques focuses more on “teachers”.

Any person who teaches at work or in home is a “teacher” in broad sense and can help learners using the TOCfE tools.

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