Why Doesn't the "High School Drop Out Rate" Drop?

By William F. Truby, PH.D.

Assistant Professor

Fall 2016

Abstract

This article provides information, questions, and answers about current approaches to dropping the dropout rate of our students. For example, our current model of education is based on the mass production or assembly line model promoted by Henry Ford back in early years of the 1900s (1900 – 1920). This model served both factory production and education well as most innovations do as revealed by initial rapid improvements graphically displayed by the S Curve. All models have built-in error rates. In the case of the Ford Assembly the error rate was approximately 27%, meaning the assembly line, when operated optimally, 27% of the product would be flawed. When this model is applied to education you can expect an error rate (dropout rate) of 27%. Since systems have great difficulty operating optimally the rate in practice will be higher. The environment is a key factor. Knowing what we know about our typical school in America you would expect a dropout rate of about 35 – 40%. In terms of our inner city schools, one would expect to have a higher error rate of about 40 – 65%. Key topics that the author covers include the high cost and low return of investment in education; people problems vs. systems problems; group think; gaming the system; and efficiency. The American educational system is challenged as never before. Perhaps it is finally time to consider the concepts of Peter Senge, the MIT author of the seminal work in organization performance, "The Fifth Discipline", who listed "systems thinking" as the most important of the disciplines in terms of promoting individual and organization performance.

Why Doesn't the "High School Drop Out Rate" Drop? The answer, it's a thinking problem. To be more precise, it's a systems thinking problem.

It is after all a legitimate question. Why doesn't the dropout rate drop? The answer is directly related to the way managers in education collectively think about the problem of dropouts.

Let me relate an experience shared by a colleague. He contacted the person in charge of administering Florida's DropOut Prevention Program. He had a key question about the persistent high dropout rate. He asked a simple question. How much of the tax payer's money have we spent on dropout prevention since the program was initiated years ago? After checking back several times over a period of months we were told "if you go back to day one my best guess is over a billion dollars." A billion that is a billion with a "b? "Yes," was the reply.

The follow up question was, what was the impact of the money and effort spent on the program? The person replied that the drop rate had increased slightly over the year. Let's see if we understand. The State spent one plus billion dollars over the years and the rate increased slightly? "What's wrong?" I gasped. The DOE person went on to say that the State had used the following strategy:

1. Identified school districts with an excellent history of keeping dropout rates low.

2. Schools within those districts were studied and "Best Practices" for preventing students from dropping out of school were identified.

3. The evidence-based findings were coalesced into an exemplary State program/model.

4. A key person in every district was selected to be the Drop Prevention Coordinator.

5. Each secondary school in turn identified a qualified person (typically a teacher) to be the DropOut Prevention Coordinator for the school.

6. The persons noted in turn were trained in the "Best Practices" identified by the State and encouraged to implement programs in their districts/schools.

Sounds good so far, right? I then asked again, "why hasn't it worked?"

She replied that we have been having problems getting the district and school coordinators to implement the evidenced-based programs we trained them in (efficiency). Sadly for the students and State resources that were lost, she was ignorant of the fact her program was in conflict with the education model in our State. She was not dealing with a people problem but a systems problem. Her lack of success was due to the fact she was working on the wrong problem or as Russell Ackoff would call it, "messes."

In systems thinking everything is connected at some level. And, there is some truth and error in every observation, statement and mental model. With that said, it is not a people problem, it is a systems problem.

Play this game with me. Imagine…. In your school district this year every ninth grader remained in school. No drop outs. Next year, all ninth and tenth graders remained. Next year, all ninth, tenth, and eleventh graders remained. The fourth year all ninth, tenth, and eleventh, and twelfth graders remained. What would be the situation in your district?

My answer? Chaos. You would not have enough buildings, rooms, chairs, teachers, resources, etc. to cope with the unexpected students. Our systems are designed and complement the model we are

employing. We can spend money and effort all day long but little will happen until we change the model we have chosen to employ.

I challenge you. Go to your local high schools. Ask the principals how many students four years ago were in the ninth grade. How many are now in the twelfth grade? All factors being equal you can now calculate your dropout rate.

Over the past few years states, districts, and schools have been under so much pressure to reverse the dropout rate, with little success, they have played games with the reporting system. Is there a difference between completion rates and dropout rates? Let's not call students who say they are "transferring" drop outs. I say they did not drop out. We do not have to follow up to see if they did or did not go to another school, then they did not drop out from our school. Another idea, if a student takes a GED Graduation Test, let's not count the student as a drop out. This "gaming the system" has gotten so bad that the Secretary of Education announced the federal government will require one federal formula to calculate graduation and dropout rates beginning in 2012. A reporting of the disease, but not a cure for the disease.

Education in many ways suffers from a severe case of "Group Think." This is a product of years of idea inbreeding beginning with college preparation for the teaching profession. Our future undergraduate teachers and sadly our graduate level future school leaders are not exposed to the concepts of systems thinking in any meaningful way. None.

This is almost terrifying when you recognize schools and school systems are in fact among the most if not the most complex social systems in existence in our society. Ask Jack Welch. Ask Peter Senge.

Is it any wonder that W. Edwards Deming, a person that arguably changed the world in terms of quality and organization performance,   listed knowledge of "systems thinking" as the most important of his four profound knowledge areas? Peter Senge, the MIT author of the seminal work in organization performance, "The Fifth Discipline", listed "systems thinking" as the most important of the disciplines in terms of promoting individual and organization performance.

Again, education ignores the fundamental idea of systems thinking. This ignorance and lack of knowledge by school leaders has resulted in a blind spot to many problems. In education this includes a lack of understanding of the essential nature of "why doesn't the high school dropout rate drop" after so much effort and cost?

The person that bests understands the past that created the present can best leverage the future.

Our current model of education is based on the mass production or assembly line model promoted by Henry Ford back in early years of the 1900s (1900 – 1920). This model served both factory production and education well as most innovations do as revealed by initial rapid improvements graphically displayed by the S Curve.

All models have built in error rates. In the case of the Ford Assembly the error rate was approximately 27%, meaning the assembly line, when operated optimally, 27% of the product would be flawed. When this model is applied to education you can expect an error rate (dropout rate) of 27%. Since systems have great difficulty operating optimally the rate in practice will be higher. The environment is a key factor. Knowing what we know our typical school in America you would expect a dropout rate of about 35 – 40 %. In terms of our inner city schools, one would expect to have a higher error rate of about 40 – 65 %.

States and the federal government continue to promote programs to reduce the dropout rate assuming people problems to be the cause while ignoring the system employed, we are working on efficiency. The question is how do we better manage the system we have inherited? When we change the fundamental nature of the system we are working with, and focus on the system and not the people, we are working on effectiveness. As you are aware effectiveness is a function of working efficiently with a more powerful model. I am advocating we work on effectiveness.

What would a more viable system look like? That is a topic for our next sharing session.

References

Ackoff, R. (2008) *Turning Learning Right Side Up.* Upper Saddle River, Prentice Hall

Aguayo, R. (1990). *Dr. Deming*, New York, Simon & Schuster

Carger, C. (2009). *Dreams Deferred: Dropping Out and Struggling*. Chicago, Information Age Publishing

Deming, W. (1989) *The Deming Management Method.* New York. Penguin Putnam, Inc.

Fine, M. (1991). *Framing Dropouts*. New York, State University of New York.

Senge, P. (2012). *Schools That Learn.* New York, Crown Publishing.

Senge, P. (1990). *The Fifth Discipline.* New York. Random House.