Teaching Gap, a book written by James W. Stigler, a psychology professor, and James Hiebert, an education professor, was first published in 1997 as a statement that documented how American education specialist tried to suggest a radical sustainable reform in teaching that can replace all the previous ones which were a failure. The book consists of a preface and ten chapters. It generally deals with the story of teaching in general and teaching mathematics in specific. However, the reader can easily realize the message that the authors wanted to convey to all teachers of all school subjects: Teachers are responsible for educational reform for any subject and skill, math is an example in the USA. The book elucidates the main problems of teaching in America during the 1990s by comparing its educational system with those in other educationally developed countries during the 1990s, Japan and Germany. It discusses different educational cultures and approaches used in the three countries. The writers have used a semi-narrative style in that they narrated the events, news and comments in a very smooth way. The reader of the book might first think it is all about mathematics and teaching it. But, the authors wrote in the preface that the points they made go well beyond mathematics. In the preface and throughout the whole book, the authors ascertain two facts: 1. Although most of the classroom examples they presented were taken from the eighth-grade mathematics, the points raised in the study can go well with all school subjects and all grades. 2. This book will not only be beneficial for teachers; it can also be useful for administrative staff, decision-makers and even politicians.
I will review the book depending on the criteria derived from Thomson, Ashley 1991 and many other sources.

In the preface, the writers started by illustrating the purpose of the book. “This book is about teaching and how to improve it” page ix. The authors’ suggestions for improvement arose from their involvement in the third International Mathematics and Science study usually referred to TIMSS.

The “Teaching Gap” is 179 pages of reporting on, reviews of and reflection about the videotaped lessons portions of TIMSS results. Far from the other TIMSS reports, this book has minimal statistical reporting. Mostly it presents condensed versions of several lesson tapes then provides insightful interpretation. There was a plethora of compelling evidence to support the bulk of their theories.

The authors of the book have given a detailed description of the best practices for teachers, proving that teachers are to be blamed for the level of classes achievement. They also discussed the importance of the cooperation between teachers and students’ parents to improve education. On page 112, the authors explained some points that can benefit any beginner teachers. For example, they talked through the steps of the lesson study process: defining the problem, planning the lesson, teaching it, evaluating and reflecting on the lesson’s effect.

The title is a revealing one. It is short and expressive. It reflects what the content of the book is. Reading the first three chapters, the reader can realize the gap among three main elements of school education: The teacher competency and classroom practice, the reform processes, and the students’ low achievement. One of the strengths of this book is that its content is really beneficial. The authors did not only mention the problem, but also they suggested solutions: “Let teachers share their ideas in conferences and just then their teaching methods will get better.” p. 40.

The book has a research-like layout. It consists of preface as an introduction. The theoretical background is in chapter 1 and 2. Chapter three and four are the procedures of the study (Sampling, study, instruments, application). The finding of the study are stated in chapter five and six. The last three chapters contain a general discussion on the findings and some recommendations and suggestions to improve teaching in general in the U.S.A.

In short, the book is such a significant document as its authors proposed a system of lesson planning to improve teaching in U.S. and that can be applied in any country’s teaching system. Their proposed system calls for teachers to work in teams and develop a single lesson plan.

As for their style, the authors have discussed their ideas in a narrative style. They narrated the American educational dilemma smoothly and in a chronological order relating time to events. At the same time they used scientific terminologies. Concepts are clearly defined. Nevertheless, their language is easy and understandable. They also used a descriptive style and where possible they sometimes tried implicitly and other times explicitly to give their impression of U.S.A teaching situation. Using persuasive reasonable logic, they arouse the readers’ suspense and suspect to share in thinking of a solution to the problem in U.S.A classrooms and then transfer the whole thoughts to the reader’s own experience of teaching reforms in his own country. The strength and consistency of argument are really obvious throughout the book. There also appears here and there inclusion of relevant secondary materials and sound documentation of events and characters that participated in the TIMMIS study.

As for the aids to understanding, the authors used charts, indexes, bibliography, typical lessons, statistical information and a list of notes at the end the book related to certain events or characters mentioned in the book pages and marked with serial numbers 1, 2, 3 ……. These are reference signals to these notes. On p.p 118, 119, the authors stated examples i.e,
educational problems and their solutions. On page 112, the authors explained some points that can benefit any beginner teachers. For example, they talked through the steps of the lesson study process: defining the problem, planning the lesson, teaching it, evaluating and reflecting on the lesson’s effect. Sometimes, they used Japanese words as kounaikenshun and many others. This attracts the Japanese teachers to read the book.

The authors have used some metaphors to give their book a more literary taste and to convey their ideas using puns, as that on page 127. They wrote, “Experts get teachers to use their tables but they often turn those tables”. On page 173 they wrote: “A large gulf separates researchers and classroom teachers.”

What is really useful is the fact that the authors ended each chapter with a conclusion of what the chapter is about and anticipated what the next chapter will discuss. In the beginning of each section, they elucidated the objectives of the chapter and linked it to the previous one. In this way, ideas have been progressed in a coherent way.

In general, the book is easy to read as its size and the typing font prompt anyone to read it. Besides, the authors make use of stylistic metaphors that hook readers’ curiosity to read more and they pinpoint an idea in a literary form. For example, the authors started chapter five with a very beautiful impressive metaphor when comparing the video contents and its underlying hidden information with a mountain ranges poking above the surface of water. Relating to stylistic matters the authors used reasoning deduction in explaining how teaching is a system (P. 75). They explained how each feature in the implementation of the lesson connects with the next one; activities near the end of the lesson will link back with those at the beginning.

The book is very beneficial for those responsible for the professional development of teachers. The model proposed in the book might help faculty predict and then prevent some of the pedagogical problems that may occur in the classrooms.

In general, the book is informative as all the recommendations given to teachers of mathematics can be applied by teachers of other subjects for improving education in the classroom. It highlights skills that teachers need to empower themselves with in order to have the required educational reform, especially as educational standards, curricula, exams, and students’ performance have nothing to do in the reform process, according to Stigler and Hiebert argument throughout the book. On page 3, the authors pointed out “Class size reductions, vouchers, and most other popular efforts to improve schools will end in disappointment if they do not fundamentally improve what happens inside the class rooms”. The book strong merits are much more than its weaknesses. What seems to be the only weak point in the book is the seriousness, strictness, and sharpness in presenting the ideas. The reader may feel that the gap they discussed is a very serious problem that needs radical, dramatic and fast remedy. In fact, I feel that this is a good point in the authors’ style as it reveals how caring and responsible they are.

In conclusion, I recommend teachers of all epistemological subjects to read the book as it presents crucial ideas for educational reform for any subject in any community. Teachers of English as a second language will find many pedagogical innovations that help them in their classroom practices.

Sources Consulted

Reviewer: Dr. Sabah Salman Sabbah
Community College of Qatar