# Thoughts on General Studies in the Yeshiva

Dr. Yitzchok Levine Department of Mathematical Sciences Stevens Institute of Technology Hoboken, NJ 07030 <u>llevine@stevens.edu</u> http://personal.stevens.edu/~llevine

#### Introduction

A friend of mine who is the general studies principal in a boys' yeshiva high school in Brooklyn has, from time to time, tried to coax me into teaching an AP Calculus course in his yeshiva. Each time he has explained to me that finding a qualified teacher for this course is not easy, and, given that I am a professor of mathematics, it would be an almost effortless task for me to teach this course at his school. A couple of years ago I felt guilty about refusing him so many times, and I decided to consider his job offer seriously. After all, I had taught mathematics in a yeshiva high school in the Sixties while completing my PhD requirements, so why not do something similar again.

From my own teaching experiences at Stevens Institute of Technology spanning more than three and a half decades, I am well aware that the college students that I encounter today are very different than the college students I encountered when I began teaching in 1968. Assuming that the same is probably true of today's yeshiva high school boys when compared to the yeshiva students I taught more than forty years ago while earning my PhD, I decided I needed more information to make an informed decision about this teaching position. Hence I bounced the idea off of a friend who has for many years taught in public school and in various yeshivas in the late afternoon. He reacted quickly when I had explained the job offer to him. "Don't do it!" he said emphatically. "Most of the boys are behavior problems! They refuse to listen! They don't want to learn! Don't do it! Don't do it!" Another friend of mine who heard this response then added, "For many years I taught at such and such a college at night. The worst behaved students were the yeshiva boys. They were only interested in getting a good grade without doing any work. Cheating was often rampant!"

These statements made by my two friends are certainly very strong, and I am sure that there are many high school yeshiva students who are well-behaved and interested in their secular studies. Nonetheless, hearing all of this led me to the conclusion that there must be something very wrong with the Torah and secular education given in at least *some* yeshiva high schools. The questions to be dealt with are, "What are the sources of these problems, and what are the remedies?"

Since almost all of my experience is with boys who have attend yeshiva high schools, my focus will be on Mesivtha education. However, many of the remarks below can also be applied to Bais Yaakov high schools.

# **Elementary School Education**

There are a number of problems that prevent yeshiva students from achieving their potential. One that must be addressed is the fact that there are boys who have completed eight grades of elementary education whose mathematics and reading skills are far below the level required for a student to master ninth grade secular subjects. Over the years I have tutored boys in mathematics, and there have been some who simply could not read properly and did not know basic arithmetic. Often, but not always, these students have attended a "Chassidshe" elementary school. When asked why they do not know fractions or their times tables, they respond, "What do you want from me? I went to such and such yeshiva. English was a joke. We learned almost nothing!"

One simply cannot expect a student who does not have the proper background to comprehend any of the subjects taught in high school. The result can only be boredom and frustration on the part of the student, which usually leads to discipline problems in the classroom. How parents can send their sons to schools that do not prepare them for high school secular subjects and then expect them to perform adequately in high school has always been a mystery to me.

There are two solutions to this problem. First of all, parents have to demand that their children graduate from the eighth grade with the reading and math skills an eighth grader should have. Secondly, yeshiva high schools should give entrance exams in secular subjects so they can evaluate the educational level of new students. Those found to be substandard should be required to take remedial and bridge courses that will bring them up to par. This will certainly entail additional cost on the part of the yeshiva and perhaps cause some stigma to those who do not pass the entrance exam. However, the present system used by many Mesivthas of simply putting all entering boys into the same ninth grade program often means that even those who are at grade level do not get the education that they should, since the group that is not properly prepared either holds back the class or, even worse, disrupts it.

# The Importance of Secular Subjects

Over the years I have tutored a considerable number of yeshiva high school boys in mathematics, primarily to prepare them for the New York Mathematics Regents Exams. Most have been students from so-called "right-wing" Mesivthas, and some come only because their parents insist that they do. It is not unusual for such students to have very negative attitudes toward their general studies. Given this, I have made it my practice to show each new student the Vilna Gaon's sefer **Ayil Me'Shulash**. When I show them diagrams of parallel lines cut by a transversal, triangles, and other geometric figures, they are often taken aback. I say something to the effect, "If the study of mathematics was important enough to the Vilna Gaon that he took the time to write a sefer about it, shouldn't you at least put effort into mastering the mathematics that you are being taught in yeshiva?"

Unfortunately, an attitude of belittlement permeates many Mesivthas when it comes to secular studies. Disparaging general studies is "in," and often not just in the minds of the students. The quotes below show that such an approach in not consistent with Torah values.

Rav Shimon Schwab wrote an article entitled "The Jews in Golus: How High a Profile" (Jewish Observer, Feb. 1988 and reprinted in Selected Writings pp. 290-300). Under a section with the heading "An Approach to the Non-Jew" he writes,

If all the nations of the world - and it's the tendency today to think this way - are depraved, foolish and wicked, it is no distinction to be better than those who are depraved, foolish and wicked. That is no basis for praise to the *Ribbono Shel Olam*. By the same token, gratitude for being given the Torah cannot be meaningful if all non-Torah science is nonsense, if all secular knowledge is without value. What glory is ascribed to Torah knowledge if its distinction is simply that it is superior to nonsense? To the contrary, *Chazal* have told us that there is indeed *chachma* (wisdom) amongst the nations. As a matter of fact, upon seeing a wise non-Jew, one pronounces a blessing, praising G-d 'for having given of His knowledge to [a creature of] flesh-and-blood.'

R. Yhonason Eybeschutz in *Yaaros Devash* 2:7 (as translated by L. Levi in *Torah and Science* pages 24-25) writes:

For all the sciences are "condiments" and are necessary for our Torah, such as the science of mathematics, which is the science of measurements and includes the science of numbers, geometry, and algebra and is very essential for the measurements required in connection with the Eglah Arufah and the cities of the Levites and the cities of refuge as well as the Sabbath boundaries of our cities. The science of weights [i.e., mechanics] is necessary for the judiciary, to scrutinize in detail whether scales are used honestly or fraudulently. The science of vision [optics] is necessary for the Sanhedrin to clarify the deceits perpetrated by idolatrous priests; furthermore, the need for this science is great in connection with examining witnesses, who claim they stood at a distance and saw the scene, to determine whether the arc of vision extends so far straight or bent. The science of astronomy is a science of the Jews, the secret of leap years to know the paths of the constellations and to sanctify the new moon. The science of nature which includes the science of medicine in general is very important for distinguishing the blood of the *Niddah* whether it is pure or impure ... and how much more is it necessary when one strikes his fellow man in order to ascertain whether the blow was mortal, and if he died whether he died because of it, and for what disease one may desecrate the Sabbath. Regarding botany, how great is the power of the Sages in connection with *kilayim* [mixed crops]! Here too we may mention zoology, to know which animals may be hybridized; and chemistry, which is important in connection with the metals used in the tabernacle, etc.

(It is worth noting that similar lists may be found in R. Abraham Ibn Ezra's introduction to *Chibbur Hameshicha Vehatishbores* and R. Bachya's commentary on *Avos*, end of Chapter 3.)

There is also the following opinion of the GRA that is given by R. Barukh Schick of Shklov in the introduction to his Hebrew translation of Euclid's book on geometry, *Sefer Uklidos* (The Hague, 1780). There he writes

והנה בהיותי בק"ק ווילנא המעטירה אצל הרב המאור הגאון הגדול מ"ר מאור עיני הגולה החסיד המפורסם כמוה"ר אלי' נר"ו בחודש טבת תקל"ח שמעתי מפי קדוש כי כפי מה שיחסר לאדם ידיעות משארי החכמות לעומת זה יחסר לו מאה ידות בחכמת התורה כי התורה והחכמה נצמדים יחד .....

(When I was in the illustrious city of Vilna in the presence of the Rav, the light, the great Gaon, my master and teacher, the light of the eyes of the exile, the renowned pious one [may HaShem protect and save him] Rav Eliyahu, in the month of Teves 5538 [January 1778], I heard from his holy mouth that according to what a person is lacking in knowledge of the "other wisdoms", correspondingly he will be lacking one hundred portions in the wisdom of the Torah, because the Torah and the "other wisdoms" are inextricably linked together ...)

Perhaps every Mesivtha should prominently post this statement in each of its classrooms.

By the way, the negative attitude toward secular subjects held by many Mesivtha students is in sharp contrast to the attitude students had years ago. About twenty years ago my eldest son applied to Mesivtha Torah Vodaath for admission to the ninth grade. Part of the admissions procedure involved an interview with the General Studies principal, Rabbi Moshe Lonner, *z*"I, who had served in this position for many years. My son and I both met with him, and, during the course of the interview, he asked me about my educational background and what I did for a living. When I replied that I had a PhD in mathematics and that I was a college professor, he was obviously pleased. (I subsequently learned that Rabbi Lonner had an advanced degree in mathematics also.) He then proceeded to outline the general studies curriculum with emphasis on the mathematics component. He spoke of the math courses in the ninth, tenth and eleventh grades and of the excellent instructors he always strove to hire. I then asked him,

"What mathematics do you teach in the twelfth grade?" He became somewhat crestfallen and replied, "What can I tell you, Dr. Levine? It is not like it was years ago, when boys like Rabbi Belsky and Rabbi Steinwurzl would stay after school and attend an extra math class that I taught. It is not like it was years ago."

A friend of mine recalled that when he studied in Torah Vodaath, he and other boys would forgo their lunch hour to attend a calculus course that Rabbi Lonner taught. It is indeed "not like it was years ago."

# The Interplay of Limudei Kodesh and Secular Subjects

From this it is clear that not all secular subjects are to be studied and that there should be a "Torah reason" for selecting those that are studied. Given this, I find it surprising that yeshivas model their general studies curriculum after what is being taught in the public schools. It seems to me that the choice of secular subjects taught in high school and how they are taught should be a function of the Torah goals they are to fulfill. From this standpoint secular studies become an extension of Torah studies, rather than a collection of courses appended onto the yeshiva day to satisfy state requirements. It may well be that if students felt their general studies program was rooted in their Torah studies, they would not disparage secular studies, since these general studies would then be, in a sense, religious studies.

There is another downside to simply taking public school curricula into the yeshiva. More often than not the curriculum that is selected is an academic one (in New York this means the Regents Curriculum). The purpose of such a curriculum is to prepare a student for entrance into college. While this makes sense for yeshivas that encourage (or at least do not discourage) its graduates to attend college, such a curriculum is a contradiction for an institution that discourages its graduates from attending college. What sense does it make to prepare students for something they are not supposed to pursue? Is it any wonder that students coming from such schools feel that their general studies are a waste of their time?

Yeshivas should develop curricula that reflect their Torah philosophies and are in consonance with them. Below are some examples of what might be done.

#### **Mathematics**

In most "right-wing" yeshivas students take three years of mathematics consisting primarily of selections from topics in algebra, geometry, trigonometry, probability, logic, and statistics. In New York passing the Math Regents is the goal, while in other states the state guidelines for public school curricula are adhered to. Often there is no mathematics taught in the twelfth grade. I do not understand why the yeshivas do not gear their mathematics courses to the goal of having their students study selections from the GRA's sefer **Ayil Me'Shulash** in the twelfth grade. Wouldn't this make sense from a Torah standpoint? If this were done, then an argument concerning the relevance and importance of studying mathematics could easily be made to the students.

While writing this article I came across the sefer **Ayil Me'Shulash HaMevuar -Ha'GRA**, volume 1 by Rabbi Avinoam Solimani. This sefer was published not long ago in Eretz Yisroel and contains the text of the first three sections (מאמרים) of the GRA's original sefer as well as modern day diagrams and Hebrew explanations of these sections. If yeshiva students were to study this sefer, they would not only learn some of the mathematics that the Vilna Goan thought was important, but they would also have the benefit of studying these topics in Hebrew, something that would no doubt improve their mastery of the language.

# **Oral Communication Skills**

No matter what one ends up doing in life, the ability to communicate clearly and effectively is important. For boys there is what should be a "golden" opportunity to learn how to make a verbal presentation before an audience – the Bar Mitzvah Drasha. However, my experience has been, more often than not, the presentation is made in a fashion that makes it either incomprehensible or unintelligible or both. Sadly, this chance to teach a young person the skills needed to present material to others in a clear and logical manner is lost. While it may well be true that the average 13 year-old boy is not capable of delivering a polished talk, this does not mean that his Bar Mitzvah Drasha has to consist primarily of mumblings sprinkled with words like *Rambam, t'phillin, gemara*, etc.

The teaching of the skills required to make good presentations before an audience should be an integral part of yeshiva education. This can be done by incorporating the presentation of material by students to their peers on a regular basis. For example, one student each day could be responsible for preparing a five or ten minute talk on the parasha or on a *Halacha*. This could be implemented in grades four or five and carried through until graduation from high school. On the high school level boys should be required to make presentations dealing with a piece of *Gemara*, while girls would present a topic in *T'Nach* with relevant *Meforshim*. It is worth pointing out that such presentations are appropriate during both *Limudei Kodesh* and *Limudei Chol*.

#### Writing

The ability to present ideas clearly and concisely in writing is another fundamental skill that our young people should be taught. An effective vehicle for doing this is to have students write précises of articles or other written documents. (Précis: A concise or abridged statement or view; an abstract; a summary; a summary of the main points of an argument or theory.) Writing a précis requires a person to understand the main points that a written document is making and to be able to differentiate between what is crucial and what is not. In the beginning many students find précis writing difficult, so it probably should not be implemented until the 9<sup>th</sup> or 10th grade at the earliest. The articles to be précised can deal with either secular or religious subjects. I have no doubt that a boy required to write a one paragraph précis of an *amud* of *Gemara* would gain a better understanding of the topics discussed on that *amud*.

#### Science

One of the many contributions that Rav Avigdor Miller, ZT"L, made during his lifetime was to teach us how one can appreciate the Creator from the world He has made. Rav Miller often took something like the ear and spent time explaining its intricacies and the function of each individual part. Such a discussion by him invariably helped his listeners realize the many miracles involved in hearing just one word. He did the same when it came to other phenomenon in nature, such as rainfall and snow. Science in yeshivas should be presented at least in part from this standpoint. Indeed, given Rav Miller's groundbreaking and inspiring talks on such topics, I have from time to time wondered why the presentation of science from this standpoint has not become an integral part of learning in Botei Medrashim today.

# History

In the article "Secular Studies: Are they for Everyone?" (Referenced above) Rabbi Mordechai Willig writes,

What about the study of history? The *Shulchan Arukh* rules that a person may not study history on the Shabbat nor during the week because it is a name date with the study of history on the Shabbat nor during the week because it is a name date with the study history is a lacking in any specific value. However, later authorities state views in direct contrast to this. Specifically, Rabbi Ya'akov Emden maintains that it is important for a learned Jew to study history – למען יידע למען יידע – so that a product a learned Jew to study history. should not appear to be an ignoramus in the eyes of the world. It would curtail his ability to communicate with people. How can someone who has no idea of what went on before his time, or outside of his place, tell someone else how to behave? What credibility will he have? One must be at least a little worldly. The Hazon Ish goes beyond this and claims that a person who doesn't learn history is doomed to repeat the failures of his people. He quotes the *pasuk* שאל אביך ויגדך זקניך ויאמרו (Deut.32:7). Rabbi Samson Raphael Hirsch gives the best answer of all. He believes that in history, especially Jewish history, on can "draw the right conclusions of the Jewish position in the world."

Thus, young people should be taught history, but not simply from non-Jewish sources. At a minimum, students should be exposed to what was going on in the Jewish world while studying the events that were going on in the world at large. For example, a Mesivtha or Bais Yaakov graduate should be able to name some of the great rabbis who were alive when Abraham Lincoln was president and know the events of importance that occurred in the Jewish world during the Civil War. Furthermore, in talking with young people, I have found many of them abysmally ignorant of Jewish history, especially Jewish history of the last two or three hundred years. Amazingly, many young people know little about the Holocaust, despite the fact that the Holocaust has had and continues to have repercussions that affect Judaism as no other event in recent history has. Yeshiva students should be required to study the Holocaust in some detail and to read at least some of the many books written by observant people about their experiences during this terrible time. Inviting observant Holocaust survivors to speak to students can add a dimension to Holocaust studies that will leave a lasting impression in the listeners' minds.

# Life Survival Skills

There is another body of knowledge that is important for our young people to have and which is often completely missing from the yeshiva high school curriculum. Some of this knowledge used to be taught in the home, but due to changes in our life styles this often does not happen now. Since many yeshiva high school students have completed almost the entire required secular curriculum by the end of the eleventh grade, some or all of the topics below could easily be given in the last year of high school.

Many of the topics listed below are things that people learn as they go through life, often by trial and error. It seems to me that it makes more sense to teach them "up front," so that young people do not have to go through the difficulties often associated with trial and error learning.

- *Map Reading*: It is surprising how many people cannot read a road map and use it to estimate the mileage between point A and point B.
- *Electrical and plumbing repair.* Shouldn't everyone, boys and girls, know how to change a light switch or replace an electrical outlet or rewire a simple lamp? Isn't the same true for replacing the washer in a faucet and other basic plumbing?

- Cooking: In most observant homes today both spouses work. While the wife may work only part time when there are young children, the fact remains that when both parents work a division of household tasks is often necessary. Thus everyone should know the basics of cooking, **boys** and girls.
- *Basic Accounting*: Every person should know how to balance a check book and fill out a simple income tax return, say a Schedule 1040EA. They should be familiar with how credit ratings are determined, how to read a statement from the gas and electric company, and how to read a credit card statement.
- Sewing: Shouldn't everyone know how to sew a button on a shirt or blouse? Won't the ability to do this really come in handy when a young person is away from family studying? More advanced sewing techniques as well as knitting and crocheting are things that girls may very well want to know once they have a family. Why not teach these skills in high school?
- *Nutrition*: We constantly read articles about the importance of eating a good, balanced diet. Shouldn't young people be familiar with what constitutes such a diet? Shouldn't they know the basics of good nutrition? And what about the importance of vitamins and minerals to their wellbeing and the well-being of the family that they will one day have?
- *Childcare*: Many Bais Yaakov graduates are married within a year or two of graduation from high school. While most boys marry when they are a few years older, the fact remains that to many proud first-time parents the responsibility of taking care of a newborn is daunting. Grandparents often step in to help and give guidance. However, why shouldn't our young people be prepared for childcare **before** their first child is born?
- *Child Development*: We want our young people to marry, have children, and raise a Torah observant family whose members become an asset to Klal Yisroel. This is best done by parents who are knowledgeable about how a child develops, what is appropriate to expect from a child at a given age, etc.
- *Child Discipline*: One of the greatest challenges facing parents is how to discipline their children so they grow up to become responsible members of the Torah community. Shouldn't young people have some knowledge of this before they marry and have children? Shouldn't they be made familiar with methods and approaches that are consistent with the Torah rather than find it necessary to turn to books on child rearing that often are at odds with Torah *Hashkafa*?

- Shopping: In today's society it is not uncommon for a man to do the food shopping or a woman to have to make a decision about what brand and model of an appliance to purchase. In order to do this in a cost effective manner and to purchase products that fulfill the needs of the family, consumers have to know about comparative shopping. For example, they should know how to figure if the three pound size is really cheaper than the one pound size, if the high tech version of a toaster is really worth the extra money or if the features are simply add-ons they will never use, etc.
- *Investing*: How many people have invested in something which sounded too good to be true and indeed was too good to be true? While one cannot protect every individual from every scam, experienced investors have an inherent sense of what to avoid. Why not have experts share some of these experiences with high school students?
- *Law*: Every Jew is bound by the principle of *Dina d'Malchusa Dina*. It is obvious that in order to live a Torah life that falls within the framework of this principle, one must know what the law of the land is. Why not invite observant lawyers to present examples of situations that illustrate how one is to implement this principle?

# Behavior, Kiddush Hashem, Honor System

An important goal of yeshiva education is to instill good midos in its talmidim and talmidos. However, the fact that general studies *are* indeed secondary to Torah studies often leads to a negative attitude toward secular studies. Some *talmidim* interpret this to mean that General Studies have no importance at all. Just as long as they are learning well, they think nothing else matters.

Years ago I heard a story about two boys who excelled in their Torah studies, but were a constant problem in their general studies classes. Not only were they not paying attention in class, but they were also disruptive and prevented the other students from learning the subject matter being taught. All efforts on the part of their teachers and the General Studies principal to curb this behavior proved to be futile. Finally, in desperation, the principal sent these boys to the Rosh Yeshiva. (This yeshiva consisted of a Mesivtha and a Yeshiva Gedola.) The Rosh Yeshiva told them the following. "When the Gedolim felt that it was necessary to introduce *Limudei Chol* into the yeshivas, they designated time to be taken from learning for these studies. To waste this time is *bitul Torah*!" Surely this attitude should be stressed by all members of the *hanhalla* of our yeshivas.

Some students lack awareness of important Jewish concepts. They do not fully comprehend the ramifications of the *aveira* of *chillul Hashem*. This can lead to the problem of cheating. While the yeshiva hierarchy certainly does not condone

this, nonetheless, the problem is often minimized and perhaps even justified by those who do engage in it with the statement "It's **only** *Limudei Chol.*"

Yeshivas have to stress that no aspect of cheating has a place in the life of any yeshiva bochur or Bais Yaakov girl. Not to do so can lead to far reaching negative consequences and attitudes that undermine the role of the Jewish people as a "Nation that is to be a light unto the other nations." In **The World of the Yeshiva**, William B. Helmreich writes (page 225), "The problem was described in the following manner by an Orthodox psychologist:

I have a friend who teaches at Brooklyn College. And he told me some incidents in his class where yeshiva guys and very religious women with *sheitlach* [wig worn for religious reasons] were cheating. He's a religious guy, a psychologist. He asked them to please stop. Then finally, on the final, he saw them and he said: "You're going to have to sit separately." So they said, "No, don't worry." So while he was standing there a friend of his came in and said: "You know, there's cheating going on in the back." So he gave them all Ds and Cs. So the guy got a call from the husband of one of the girls who said, 'How could you do this to one of your own? It's just a college course, *limudei chol* [secular studies]. It's nothing.' That's the attitude."

One can only wonder what opinion of observant Jews this behavior engendered in the minds of the non-Jews who attended this class.

Given this, I am at a loss to understand why an Honor System is not part and parcel of every yeshiva high school. An Honor System is an excellent vehicle for teaching ethical behavior, and every Mesivtha and Bais Yaakov should implement one as soon as possible and make sure that it works well.

# Implementation

Implementation of the ideas outlined above calls for an extensive revamping of the General Studies curriculum that is presently taught in our yeshiva high schools. Given the limited resources that almost all yeshivas are bound by, and the scarcity of teachers qualified to teach in consonance with this approach, a natural response to these ideas is, "Even if we wanted to do this, we couldn't." However, one need not introduce all curricular changes at once. In fact, it is probably best done gradually, so that each innovation can be evaluated and modified as needed. Also, the development of these changes could be shared by various yeshivas. For example, Yeshiva A could develop the twelfth grade math course based on the **Ayil Me'Shulash HaMevuar**, and Yeshiva B could put together a history course that coordinates Jewish history with history as it is presently taught. Once these courses are developed, then the two yeshivas could share them.

Finally, there is a resource that is becoming available that yeshivas should take advantage of. There are talented people with excellent Torah and secular backgrounds who will be reaching retirement age within the next decade. It is not unlikely that some of these professionals will be willing to devote their time at little or no cost to assist the yeshivas in developing new courses and directions of study. (I am indebted to Jacob I. Friedman, Esq. of Proskauer Rose LLP for pointing this out to me.)

# Conclusion

The thoughts expressed above are made with the goal of giving secular studies their "just due" within a Torah framework. Implementing them will require innovation and imagination on the part of those who direct and teach in our yeshivas, in *Limudei Kodesh* as well as in *Limudei Chol*. However, we must move boldly and quickly, because this is an area that in many yeshivas sorely needs attention.