Striving for Cognitive Excellence

Jack Nahmod

Abstract: How our students think is no less important than what our students know. But do Jewish studies teachers strive for cognitive excellence? This article suggests that Orthodox education is characterized by fear of—rather than faith in—reason. Yet reason is not only the foundation of the highest educational levels according to thinkers such as Benjamin Bloom and Israel Scheffler. For Maimonides, it is the path to God. The reasonableness of our students must therefore be nurtured, not feared, and we cannot afford to graduate students with a higher quantity of knowledge than the quality of their thought.

Biography:
Rabbi Jack Nahmod is a TaNaKH curriculum coordinator and teaches TaNaKH and Talmud at the Solomon Schechter High School of Westchester. He previously was chair of the Talmud department and taught Talmud, TaNaKH and the History of Zionism at Beth Tfiloh High School, and was rabbinic associate at Beth Tfiloh Congregation, in Baltimore, MD.
Striving for Cognitive Excellence

Jack Nahmod

There is of course much to say regarding what the graduate of a Modern Orthodox school should know. No less important than what our students know, however, and perhaps even more important, is how our students think. This is not only because we are teaching our students to be life-long learners, far beyond their time with us. This is also because today, even as we are still teaching our students, the knowledge we provide represents only a small percentage of what they are actively accessing and passively being bombarded with on a constant basis. In other words, students rely on us less and less every day for what they know.

Assuming access to previously inconceivable amounts of knowledge, the question of how our students think becomes even more important. Of course, this is not a new issue in the world of education. Benjamin Bloom’s “Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook 1: Cognitive Domain” famously classifies and orders the objectives of education as follows: Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation. (See Bloom’s Taxonomy, a Forty-Year Retrospective, ed. Lorin W. Anderson and Lauren A. Sosniak (Univ. of Chicago Press, 1994)). By design, this taxonomy focused on the cognitive domain, not the affective or psychomotor domains. (Id., p. 2)

So much of what we discuss in Jewish education focuses on the first two, Knowledge and Comprehension, which are briefly described as follows:

1. Knowledge “emphasize[s] remembering, either by recognition or recall, of ideas, material, or phenomena.” (Id., p. 18)

2. Comprehension “emphasize[es] ... the grasp of the meaning and intent of the material.” (Id., p. 21)

This is characterized by translation, interpretation and extrapolation.

Knowledge, it is safe to say, receives significant attention across the educational spectrum. With regard to comprehension, our focus on sacred texts, with its requisite translation and interpretation, causes us to teach towards Comprehension in ways that general educators might not. However, beyond this second cognitive level, can we be proud of how we educate?

The subsequent four levels, already mentioned above, are briefly described as follows:

3. Application “requires comprehension of the method, theory, principle, or abstraction applied.” (Id., p. 20) If a student is given a new problem, she will bring to bear upon it “the appropriate generalizations or principles.” (Id., p. 21)

4. Analysis “emphasizes the breakdown of the material into its constituent parts and detection of the relationships of the parts and of the way they are organized.” (Id.)

5. Synthesis “is here defined as putting together of elements and parts so as to form a whole” that “constitute[s] a pattern or structure not clearly there before.” (Id., p 23)

6. Evaluation “is defined as the making of judgments about the value, for some purpose, of the ideas, works, solutions, methods, material, etc.” (Id., p. 24)

One can argue that level three, Application, is also something that Jewish educators do well. In TaNaKH and Talmud, hazal and parshanim take us through mazes of cross-references in order to determine the meaning and potential applications of a word, phrase or idea. However, this actually involves Comprehension, where a student knows “an abstraction well enough that he can correctly demonstrate its use when specifically asked to do so.” (Id., p. 20) Application is more than this, where a student “will apply the 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.” (Id., pp. 20-21)

The sixth level, Evaluation, requires more discussion. Bloom explains: “Although Evaluation is placed last in the cognitive domain because it is regarded as requiring to some extent all the other categories of behavior, it is not necessarily the last step in thinking or problem solving. It is quite possible that the evaluative process will in some cases be the prelude to the acquisition of new knowledge, a new attempt at comprehension or application, or a new analysis or synthesis.” (Id., p. 25) This is consistent with what Beverly Gribetz writes regarding Talmud education: “Students can be engaged in a discussion of ideas and values while they are in the process of attaining a basic grasp of the material.” (On the Translation of Scholarship to Pedagogy: The Case of Talmud, (Jewish Theological Seminary of America, 1995) p. 14)

At the same time, though, “the evaluative process” of Bloom and “a discussion of ideas and values” do not necessarily rise to Evaluation as meant by Bloom’s taxonomy: “[Q]uick decisions not preceded by very careful consideration of the various aspects of the object, idea or activity being judged” would, according to Bloom, be considered only opinions. By contrast, Evaluation is “made with distinct criteria in mind…based on a relatively adequate comprehension and analysis of the phenomena to be appraised.” (Bloom’s Taxonomy, p. 25)

The question of why we do not do more beyond Comprehension can be sharpened within the specific context of Modern Orthodoxy. The term “Modern Orthodoxy” is fraught with meaning, a union of values that can be complementary but also competing. Modernity, with its hallmark secularism and skepticism towards religion, and its “marketplace of ideas,” is coupled with Orthodoxy, literally, “the right opinion” about God, Torah and the Jewish people. If we are sending our graduates into the world with an identity that presents internal tensions, for a life in which little is taken for granted, knowledge and comprehension will not suffice; we must provide an education that prepares them for the processing and reprocessing of old and new beliefs and ideas.

These goals would be served especially well by the attainment of levels three and six of Bloom’s taxonomy, Application and Evaluation. It will help our discussion to provide concrete examples within Jewish education of what is meant here. An illustration of Application in TaNaKH is the idea of פֶּכֶד עון אָבֶּתָו עַל בֵּנֵי אָבֶּתָו עַל בֵּנֵי נוֹהָלָו רֵבֶּעָם, that God visits the sins of the fathers on the children to the third and fourth generation. (Ex. 34:7) Of course, Jeremiah teaches that כִּי אִם הָאִישׁ בּוֹעֵר יָמוֹת, every person will die for his own sins (31:29), as reiterated by Ezekiel (18:20). (See Makkot 24a) What are the implications of these ideas for those who are born into poverty? Those who are abused as children and themselves become abusers or other types of criminals?

The second chapter of Makkot (8a) offers another example of Application, within the talmudic context. A discussion of causation arises within the specific context of someone throwing a clump of dirt at a tree, which ultimately causes fruit to fall and kill somebody. The discussion raises the question of individual responsibility for an outcome that has other causes as well, and whether such other causes supersede the individual’s actions. How might this relate to individual responsibility for pollution and global warming?

As for Evaluation, the last mishnah of the fourth chapter of Megillah offers an example. It indicates that certain passages of Torah were read to the community but not translated, unlike most others at the time. What issues does this raise with regard to access to information, then and now? How should decisions be made as to what we should and should not know, and who should make such decisions?

In Qiddushin 20a-b and 33b-34b, the mitzvot are assigned by gender according to whether they are positive and time bound. The examples and counterexamples brought to illustrate the gender categories raise the question of whether the Talmud’s categorizations stand up to Analysis. Synthesis might yield different conclusions. The question of why the Talmud uses these categories,
then, is ripe for Evaluation both internally, within the Talmudic context, and from our modern perspective. Should mitzvot be assigned by gender? What purpose does such a system serve? What are the benefits and drawbacks?

With these concrete examples as a backdrop, we can now return to our question: Why does Jewish education generally not strive for higher cognitive levels? Many possible answers undoubtedly come to mind, the enumeration of which is beyond the purpose here. For present purposes, one particular answer will be considered: Orthodox education today does not venture much beyond Knowledge and Comprehension because it is characterized by a fear of, rather than faith in, reason.

Israel Scheffler, in an essay entitled “Moral Education and the Democratic Ideal,” describes the goals of education in a way that can help us understand the answer being suggested here. (Excerpts from “Supplement: Israel Scheffler,” in Visions of Jewish Education, eds. Seymour Fox, Daniel Marom and Israel Scheffler (Cambridge Univ. Press, 2003))

Scheffler writes that in education “the fundamental trait to be encouraged is that of reasonableness. To cultivate this trait is to liberate the mind from dogmatic adherence to prevalent ideological fashions, as well as from the dictates of authority.” (Visions, p. 246) He adds:

In training our students to reason we train them to be critical. We encourage them to ask questions, to seek and scrutinize alternatives, to be critical of their own ideas as well as those of others. This educational course precludes taking schooling as an instrument for shaping their minds to a preconceived idea. (Id., p. 247)

Here, it seems, is the rub. Orthodox education is usually viewed as “an instrument for shaping” the minds of students “to a preconceived idea”—specifically, the aforementioned “right opinion.” While we might be comfortable with liberating students’ minds from “dogmatic adherence to prevalent ideological fashions” in our surrounding culture, it would generally not be desirable to also liberate them from “the dictates of authority!” And as Scheffler continues, Bloom’s language comes back to haunt us: “For if they seek reasons, it is their evaluation of such reasons that will determine what ideas they eventually accept.” Evaluation, the highest level of cognition according to Bloom, is what leads our students to either accept or reject our teachings. This is enough to make any Orthodox educator squirm.

The implications of this idea are addressed by Scheffler himself:

Such a direction in schooling is fraught with risk, for it means entrusting our current conceptions to the judgment of our pupils. In exposing these conceptions to their rational evaluation we are inviting them to see for themselves whether our conceptions are adequate, proper, fair. (Id.)

When our ideas are subjected to the judgment of our students, those ideas become profoundly vulnerable, as do those of us who are teaching them. Elaborating on this risk, Scheffler draws comparisons to science and moral education that will be especially helpful within the context of Jewish studies:

Such a risk is central to scientific education, where we deliberately subject our current theories to the test of continuous evaluation by future generations of our student-scientists… And…it is central to the democratic commitment, which holds social policies to be continually open to free and public review. In sum, rationality liberates… (Id.)

Still not what the Orthodox community wants to hear. As Scheffler says elsewhere, “our independent conceptions of truth, morals, logic and evidence must take precedence over the inherited text as it stands.” (Teachers of My Youth: An American Jewish Experience, excerpts from “Supplement: Israel Scheffler,” in Visions. p. 235.)

Nevertheless, Scheffler has much to offer that is amenable to Modern Orthodox education, and can help gird us as we strive for the highest levels of cognition:

Let no one, however, suppose that the liberating of minds is equivalent to freeing them from discipline. Laissez-faire is not the
opposite of dogma. To be reasonable is a difficult achievement. The habit of reasonableness is not an airy abstract entity that can be skimmed off the concrete body of thought and practice. Consider again the case of science: scientific method can be learned only in and through its corpus of current materials. Reasonableness in science is an aspect or dimension of scientific tradition, and the body of the tradition is indispensable as a base for grasping this dimension. Science needs to be taught in such a way as to bring out this dimension as a consequence, but the consequence cannot be taken neat. Analogously for the art of moral choice: the moral point of view is attained, if at all, by acquiring a tradition of practice, embodied in rules and habits of conduct. Without a preliminary immersion in such a tradition—an appreciation of the import of its rules, rights, and demands—the concept of choice of actions and rules for oneself can hardly be achieved. Yet the prevalent tradition of practice can itself be taught in such a way as to encourage the ultimate attainment of a superordinate and comprehensive moral point of view. (Id.)

Here is where we find a meeting point between Orthodox education and Bloom’s cognitive goals. Scheffler is not proposing a free for all, an unbounded and unguided education. “Reasonableness in science is an aspect or dimension of scientific tradition.” In other words, students must possess a proper foundation of knowledge before exercising that “fundamental trait…of reasonableness,” before applying their “test of continuous evaluation.” And in Scheffler’s example of moral choice, one must acquire “a tradition of practice, embodied in rules and habits of conduct.” Otherwise, “the concept of choice of actions and rules for oneself can hardly be achieved.”

Based on what Scheffler is saying, the typical Modern Orthodox education already provides precisely what is necessary for achieving the highest levels of cognition: “a foundation of knowledge” and “a tradition of practice.” Without it, Scheffler says, his standards cannot be met. Isn’t it then our responsibility to push our students—those who are capable, as will be addressed later—to such levels? Ironically, one might even argue that Modern Orthodox education sets into motion a way of thinking that makes Bloom’s higher levels inevitable. In other words, student thinking is going to move on with or without us. If that is the case, we can run but we cannot hide; if our students’ minds are racing ahead, it is not only our responsibility but also—for the cynics among us—in our best interests to teach them to the highest levels before somebody else does, or before they do so themselves.

Of course, even with a proper foundation, and our best intentions when we pursue higher levels of cognition, there are no guarantees as to where our students’ inquiries and ideas will lead. Then why take the chance? Let us stop at Knowledge and Comprehension, sprinkle in a little Application, and be done with it!

I am reminded here of Rambam’s faith in reason, particularly the way it is articulated in blunt terms towards the end of the Guide of the Perplexed. “If…you have apprehended God and His acts in accordance with what is required by the intellect, you should afterwards engage in totally devoting yourself to Him, endeavor to come closer to Him, and strengthen the bond between you and Him—that is, the intellect.” (The Guide of the Perplexed, III:51, trans. Shlomo Pines, (Univ. of Chicago Press, 1963), p. 620.)

Reason is the path to God. One should aim higher than observing the mitsvot without the involvement of any thought process; higher than studying the law and believing “true opinions on the basis of traditional authority”; higher than “plunging into speculation concerning the fundamental principles of religion,” although such a person is on the right path. (Id., p. 619) “He, however, who has achieved demonstration, to the extent that is possible, of everything that may be demonstrated; and who has ascertained in the divine matters, to the extent that is possible, everything that may be ascertained; and who has come close to certainty in those matters in which one can only come close to it” is as close as possible to God. (Id., p. 620)

To be clear, the claim here is not that every person has the ability to achieve the highest religious and
cognitive level described by Rambam, Bloom or Scheffler. Rambam, it should be noted, is inappropriately harsh and dismissive of those who cannot. There must be room for differences in learning and personality; striving for the highest religious and cognitive levels must not come at the expense of students who lack the necessary intellectual abilities, or perhaps even interest. Nevertheless, the point still stands that for those students who can achieve the most advanced cognitive levels, more must be done in Jewish education.

We cannot afford to graduate students with greater quantity of knowledge than quality of thought. We should be setting our students on a path of intellectual development that enables and empowers them to investigate the principles of religion per Rambam, to apply and synthesize and analyze and evaluate per Bloom and Scheffler. The reasonableness of our students is something to be nurtured, not feared, especially in light of their solid traditional footing. When we avoid training our greatest minds to be great in their Jewish studies in the same way as they are trained in their general studies, the risk of losing our students to other pursuits is greater than the risk of providing them with a worthy education. In choosing not to do so, we demonstrate a profound lack of faith in our tradition, and I daresay, in God.