

Developing Talent in Young People

edited by Benjamin S. Bloom, Ballantine Books, New York, 1985.

Led by noted educational researcher Benjamin Bloom, the team worked with immensely talented young people in six fields of endeavor:

- concert pianists
- sculptors
- Olympic swimmers
- world-class tennis players
- research mathematicians
- research neurologists

In each field 24 outstanding individuals in America under the age of 40 were invited to participate in the study. The individuals were picked on the basis of the most objective criteria the research team was able to devise after consulting with experts in the particular field:

- finalists in international competitions
- recipients of prestigious and highly competitive fellowships or prizes or awards
- members of the US Olympic team (swimmers)
- achieving top ten ranking in the world (tennis players)
- their writings frequently cited in papers published by others
- well-regarded by the chairman heads of the field's departments at leading universities in America

About 20 individuals from each field actually participated in the study. They were interviewed, then their parents, and sometimes coaches or teachers. The researchers looked for similarities within each field and then across the fields. They found some very interesting commonalities and patterns.

“The child who ‘made it’ was not always the one who was considered to be the most ‘talented.’ Many parents described another one of their children as having more ‘natural ability.’ The characteristics that distinguished the high achiever in the field from his or her siblings, most parents said, was a willingness to work and a desire to excel. *Persistence, competitiveness, and eagerness* were other often-used terms” (p. 473).

“It is important to know the right people, schools, and events in order to succeed . . . but . . . an individual or a family doesn't have to be born knowing the right people or places . . . if they started early enough, worked hard enough, and cared enough, they could and did learn to master the system” (p. 496).

“Over and over the [young people] made reference to the impact of teachers for whom they felt love, admiration, and respect, and from whom they felt dedication to [the field] and to their students' development. Several said they felt they were ‘going nowhere’ when they worked with teachers who lacked such qualities” (p. 499).

No matter the field, the children seemed to go through three stages in their development.

stage one

CHILDREN

For children, stage one is the romance stage. The field entices them. They are drawn in. They begin to get involved. They play, mess around, explore, discovery. They learn the basic skills in an atmosphere of fun. Their motivation is external; they work for praise, attention, applause, approval, and the chance to be regarded as something special. Depending on the field, the family, and the children themselves, this first stage could last until junior high or high school.

What sets these children apart from other children who are also engaged in exploring the field is their willingness to work. As one researcher put it, “This child more readily submitted to the regime of daily practice. He or she followed instructions, concentrated on the task, and seemed to enjoy practice instead of considering it a drudgery” (p. 473).

For the children in the study the standard home life was very child-centered. One or both parents spent a great deal of free time with their children. While children were in grade school, one parents tended to be home when the children were home.

TEACHERS

At this stage the best teachers are described as being good with children and someone the children are comfortable with. They are supportive, warm, loving, caring, nurturing. They give positive support and rewards like stars and stickers and candy and put smiling faces on papers. They are a “second mother.”

They are not necessarily leaders in the field. They don’t necessarily have the highest skills themselves. Their gift is they make the field of study enjoyable for the children. They can make beginning lessons seem like fun.

PARENTS

Parents have enormous influence at this stage. They set the standards and expectations for their children. In every single instance of young people interviewed for this study, each had parents who believed, taught, and modeled the old-fashioned Puritan work ethic: work hard at whatever you do, anything you do should be done well, practice deferred gratification (get your work done before you play).

“Simply put, parents who get the message across to their children (either by their own example or by explicit instruction) that being smart is better than not, that reading or active learning is better than watching television or wasting time, and that taking responsibility for certain tasks and for one’s self is important, [those parents] produce children who are more able and eager to learn and

consequently higher achievers. Parents who do not feel that learning is that important, or who for some reason are not able to get that message across to their children, tend to produce youngsters who have a harder time learning, presumably because they find it difficult to put in the effort required” (p. 141-142).

These parents did not restrict their children’s interests to one field. They tended to want to their children to do well and be happy in whatever field they chose. As the mother of one mathematician said,

“The idea was to see if I could have a bright child who was well adjusted, getting along with people, having friends, having a lot of interests—not being single-minded” (p. 273).

Other parents would give general advice “Be your own person,” “Be well rounded,” “Get the most out of your abilities,” “Be organized” (p. 273).

On the other hand, these parents did have enormous influence over the field of endeavor the children chose. From a very young age the children were exposed to areas of study that the parents valued: music, arts, sports, intellectual pursuits. They were often required to participate, at least for a while, in piano lessons or sports activities, or in accompanying parents to museums. If children showed an interest, their parents supported them in continuing in the field, and not just in the abstract sense. Parents were able to help in tangible ways, for example, by teaching their children skills or by practicing with them. Because parents felt comfortable with the field and enjoyed it themselves, they encouraged their children to continue in the field. All the extraordinarily successful individuals interviewed for this study went into fields their parents valued.

stage two

CHILDREN

During the second stage children work at learning the grammar of the field—its structure, its rules, its discipline. They work on mastering techniques, skills, understandings, and strategies for tackling problems. They practice drills or strokes or the use of tools or algorithms. They start moving toward intrinsic motivation—they wouldn't be willing to do the level of work required if they weren't at least partly internally motivated. "The work . . . was becoming much more than a requirement or an obligation . . . they were becoming skilled . . . it was something they could do, and do well . . . one thing that nobody else could do" (p. 485).

The young people start to identify themselves in terms of the field, as someone who plays the piano, as an artist, a scientist or inventor. They are recognized as being accomplished in their field for their age by family members or classmates, by school officials or coaches or private teachers, perhaps even by community members or organization officials.

Depending on the field, the family, and the children themselves, this first stage could start at age eight or not until high school. While it is true that "learning may begin in the second phase, . . . it would be 'barren' or 'feeble and intermittent'" (p. 434). Being expected to work at a level of technical mastery without first having the time to play with a subject and become captivated by it leads to work that is sterile and lifeless.

TEACHERS

The best teachers at this stage are described as tough, strict, demanding. Generally more accomplished themselves than early teachers, they set high standards for accuracy, precision, effort, accomplishment. They make the field interesting, exciting, and challenging.

PARENTS

Parents at this point often see the need for the children to move from the level of playful exploration to a new level of training. They seek out the teachers or coaches who can meet the higher-level needs of their children. Their support becomes less hands-on helping with instruction and practice to support in terms of commitments of time and money—sometimes enormous commitments of time and money. It can happen that other siblings in the family don't get the same amount of time and money spent on them.

Family vacations and free time at this stage can center around the field—going to tournaments or camps.

stage three

CHILDREN

In stage three the young people work toward mastery. They go beyond the rules and regulations of their field to develop their own style, strategy, interpretations. They move from the concrete application of skills to an analysis of the field in general, the holistic view rather than the specific. They work at “finding the larger meaning, making the learning personal and worthwhile, and becoming educated about something” (p. 433). For example, one moves from playing the piano to becoming a pianist to learning to make music.

Typically this stage doesn't begin until late high school or into college or the equivalent. “Moving to the third phase without adequately working through the second would leave the learner forever limited by too poor an understanding of the rules . . . to know when the rules could be profitably ignored” (p. 434).

By this stage motivation for learning is all intrinsic. The young people work—and they are often still unpaid—for seven to 14 hours per day, every day. Instead of being told how good they are, they are having their performances dissected by experts who critique every flaw. They compete against other young people who are equally talented in the field. And they love the demands being placed on them. For them, it's as much play as it is work. They are happy to be allowed access to the tools and equipment and instruction. They become dedicated to an activity that becomes an avocation, a calling, or a life-long career.

TEACHERS

The best teachers for this stage are the elite in the field, hand-picked as mentors. Students apply to study with them and are awestruck and deeply honored to be chosen. These master teachers are slave drivers. They are passionately committed to their field, and they make extraordinary demands on their students.

PARENTS

Parents continue to pay for their children's training at institutes, colleges, graduate schools, and sometimes even beyond—the parents of one sculptor paid her living expenses for a couple of years after college until she could establish herself as an artist and begin to support herself.