and creativeness, now practically restricted therein to drawing, paint-

ing, and theme writing.

[611] But to the present writer, such an educational revolution seems both too vast a labor for a Hercules, and also not what is needed for the mass of boys and girls. Some are headed for jail, almost all for routine tasks in industry or housekeeping; only a percent or two can ever become creative scientists, inventors, artists, or other innovators (¶ 576). Moderate conformity and standard information, not world-outthinking originality, is what the mass most need, and is already the main aim of all our schools below graduate level. Our logical course, would be first to identify, when we can learn to do it, the few who have a chance by their mentality and the future job supply, to become creative thinkers or other leaders. Then we must accord to these few, proper, effective educations for their precious talents, and lastly assurance of suitable work on graduation. There are many ways to further all this: the psychologic science and tests which our cited authors are rapidly improving through governmental support; elementary and high school classes graded by ability, in different subjects separately, such as Conant endorses; 607 special schools like the Bronx High School of Science, with its brilliant student body; private schools for the well-to-do, giving scholarships to some of the able less fortunate; NSF and other collegiate scholarships and graduate fellowships; all sorts of assistance to public high schools and nonsecretarian colleges, to improve their curriculums particularly in science and courses for the creative (recalling what schools the physical science men come from (¶ 606)); and income tax assistance to parents supporting able scientific students in college. But in all this supporting of education we should bear in mind what sorts of students will pay off in later life, and that selection simply on the basis of class grades, IQ, character, and being liked by the teachers, will shut out a considerable part of the original, creative talent. (¶ 601-606, 9, and

[612] Finally, most basic of all, we should encourage by tax and other means parents who could beget and rear such children, to do so, instead of letting the race be increasingly taken over by the mentalities

and homes less capable of science.

## TEACHING THE ART OF INVENTION

[612.5] Inventiveness has hitherto been practically always treated as simply a special gift that comes by nature. But the only activities that come so, without need of instruction, are such as swallowing, sneezing, and scratching oneself. Everything else needs teaching, training upon the instinctive bases; so why not the supreme profession, inventing and discovering? All fine arts, all the sciences, morals, religion, leadership, mental hygiene, all are taught in regular university and often lower grade courses; so why not the supreme art of using the mind to create new knowledge, not for the individual student but for the whole world? \*\* Yet only during about the last dozen years,

<sup>608</sup> Guilford cites experiments indicating originality can be taught, at the expense of ideational fluency, which does not matter much except perhaps pedagogically, and for brainstorm scoring. N 557, p. 159.