

School education and the examination system

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There is a good deal of discussion about secondary and higher secondary education and the examination system these days. The drawbacks of the extreme importance given to marks in the examinations are there for all to see. Everyone, right from the HRD Minister, bigwigs in NCERT and other central and state institutions, is talking about these maladies and suggesting solutions. Before accepting a new alternative, there must be some foresight about the picture that may emerge in two or three years if a certain innovation is carried out, lest there is a fiasco and we are faced with a chaotic situation.

One of the alternative proposals that is making rounds is to scrap the examinations up to the ninth standard, and to give grades instead of marks at Class X. For further education, it is proposed in this model, that there will be appropriate entrance examinations everywhere, after Class X and Class XII. It is felt that there are many pitfalls in this alternative and perhaps not enough thought has gone into it.

Here I wish to propose a different model, more for the structure of Class X and Class XII education, than for examinations *per se*. It will have definite advantages and will not require much financial inputs. The alternative is in fact not new in the sense that it has been followed in the developed countries and some other parts of the world for quite some time now. Before elaborating on it, let me first briefly go through the present system.

The present system

In the present pattern of the Secondary School Certificate (SSC, Class X) examination, a student is required to study and to take the exam in a set of nine subjects. Similarly, for the Higher Secondary Certificate (HSC, Class XII) examination, one is required to pass in a set of six subjects. The nine subjects for Class X are divided into four categories. Among these, a student has a limited option of selecting subjects only in the language category. There is no choice in the remaining three categories, viz.

mathematics, sciences and social sciences. In creating such a structure, educationists and leaders were of the opinion that when a student comes out with an SSC, he must have studied mathematics, science, English, etc.

Here, some statistics of numbers might help. Of every 100 students who enter Class I (this number in the entire country is 12 to 15 crore today), 14 (about 2 crore) take the SSC examination. Only about 7 out of the 14 students who reach this level pass the SSC examination and an equal number fail (about 1 crore each). About 5 or 6 of the initial 100 at Class I seek higher education beyond SSC. In turn, this means that about 20 lakh of the 1 crore successful students at the SSC drop out of the educational stream every year.

In my younger days, music, drawing, etc. were important subjects and one could choose them as allowed subjects at the SSC examination. But today, they have been relegated in many states, simply because they do not fit into the nine-subject format. It is an irony that one can do BA in music, but the subject is not offered at SSC!

Drawbacks in the present system

The main drawback of the present system is that there is no flexibility, there are very limited options, and a set pattern is imposed from the top. As knowledge expands, often there is a need to introduce new topics or areas, either in small parts or as full courses. There is no room for such innovations in the present pattern. But of course, new topics have to be introduced. So what happens? Either the new topic is added to some existing course, increasing the load of the child further, or some part of the existing course is simply dropped.

A few years ago, it was felt that a bit of economics should be taught at Class X. The social sciences contained history, geography and civics. So a bit of economics was added to one of these. Similarly, a need was felt to introduce energy sources and environment at Class X. So these were added to the science subjects which earlier contained

physics, chemistry and biology. Now during the past year or so, we are watching a new phenomenon – the centre and most of the states want to teach computers and IT at Class X. In fact, the year 2001 began with an announcement from Goa School Board that, from the new session beginning June 2001, IT will be compulsory subject for Class X.

There is another example from a university. Around September 2000, Bangalore University announced that its Management Council had decided to introduce IT as a full course at all its post-graduate exams. So what happens? The decision of the top body goes down to the Board of Studies of each subject for implementation at all PG courses, science, humanities, arts, commerce, etc. What are the options left before each Board? Either fit in some additional material or simply drop some existing topics!

A different alternative

The first requirement for any innovation at the SSC level is to throw away the fixed nine-subject pattern and introduce enough flexibility. Let us consider two streams of students: (a) Those students (about 1 crore per year) who fail to clear at least one of the nine subjects in their SSC exam or those (about 20 lakh) who are satisfied with an SSC and do not wish to study further; and (b) those students (about 80 lakh) who pursue higher education after their SSC. Any change affecting such a large number of students requires a good deal of discussion and brainstorming.

We should do away with the nine-subject SSC package as suggested above, and consider each subject separately, so far as exams and passing and failing are concerned. Let us use the phrase 'attaining secondary level competence in a subject' to mean passing in that subject. Breaking free from the nine-subject package will also mean that we have more flexibility to introduce additional subjects. Let us see how this will benefit both the above categories of students.

Consider first students who 'fail' to clear the SSC examination or those who do not want to pursue higher education. This means that we are thinking of 1.2 crore students every year. It is well-known that the maximum failure occurs in subjects like mathematics and English, followed by science, and then the remaining ones. A student is labelled an 'SSC fail', if he fails even in one subject. Now several of the 1 crore 'failures' actually pass in, say, 5–8 subjects. Many of them do not intend to study further, even if they had passed SSC. Some may want to become musicians, artists, painters, technicians, photographers, sportsmen, farmers, businessmen, etc. These students would be satisfied with acquiring secondary level abilities in a few subjects. Should we declare a student an SSC fail because he has not cleared nine subjects of our choice, or be positive and declare that he has attained SSC level abilities in a certain number of subjects of his choice? The latter alternative will have a very positive psychological impact on the student.

Even for those students who pass SSC and pursue higher education, why should we insist that each one of them (80 lakh per year) study subjects like English, Hindi, mathematics, science, etc. If a more flexible system is introduced, so that we float and make available an assortment of, say, 15 or 20 subjects, the student may choose nine subjects of his choice from among the available subjects. Note that I am *not* suggesting that the number (nine) of subjects as a qualifying requirement for further studies should be reduced, but

that there should be more flexibility in the choice.

When we think of passing or failing in each subject independently, we can introduce many subjects, like music, painting, economics, energy and its sources, environment, IT, and several Indian and foreign languages. This will also encourage the introduction of many courses with more relevance, such as industrial mathematics, general science, art appreciation and such others. These would be much more relevant in their future life. Each school could choose to give instruction in at least 9, or more of the allowed subjects, depending on its infrastructure and capacity. Every student would choose 9 or less than 9 subjects depending on his interest, ability and an eye to the future. In fact, exceptionally bright students may want to attain SSC level abilities in more than 9 subjects, by choosing an additional subject.

For admission to higher education courses, each organization may lay down its eligibility requirements. In terms of the present nomenclature, for example, to be eligible for admission to the science stream for higher secondary education, one may be required to pass SSC in at least nine subjects, with two mathematics and two science subjects and five other subjects.

A similar flexible pattern should be adopted at the higher secondary level too. A student should be allowed to choose any six subjects, with almost no condition about the choice of combinations. Thus a student may choose music with physics, or mathematics with biology, or chemistry with economics.

Epilogue

The major proposals made here can now be summarized as under:

1. Several subjects should be floated at the SSC level, which would include several languages, various courses related to mathematics, many science subjects, including energy studies, pollution, IT, etc. and courses related to humanities and arts.
2. Do away with the three-language formula. It has outlived its utility.
3. There should be almost no condition on the combinations of subjects a student wants to choose for his SSC.
4. Passing in each subject should be treated independently and announced and certified as such.
5. A school may run at least 9, or more of the allowed subjects, depending on its infrastructure and facility.
6. A similar pattern should also be devised at the higher secondary level, with many subjects available for choice and almost no condition about the choice of combinations.
7. Every curriculum of higher study may lay down its norms of eligibility regarding which subjects the student should have studied for admission to that course.

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