What makes students drop out of the Chemistry track in the Cypriot Secondary Education.

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My study will attempt to comprehend what makes students drop out of the Chemical track in secondary education in Cyprus.

In terms of research families, both qualitative and quantitative strategies will be employed, since I am aware that no data collection can guarantee truthfulness alone. Additionally, I will make a deliberate decision to focus on the richness and depth of the data.

As far as research approach is concerned, the survey will constitute the main tactic I will be using while, at the same time, a kind of action research with elements of experiment will be introduced. As regards data collection techniques, I will mainly be using questionnaires while for triangulation reasons I will be employing interviews as well. The target population is the upper secondary education students while my sample is the students of the Unified Lyceum of Pallouriotissa (state secondary upper school).

More particularly my study will focus on students aged 15 in the first grade of the above school in Nicosia at the end of the first term, when their memories will be fresh of the material covered. My investigation deals only with students of the first grade, since I teach four classes of this and this fact will enable me to divide students into two groups with a view to yielding comparative results at the end of the study. The data analysis for the quantitative part of the research will be effected through the software package SPSS and for the qualitative part through thematic analysis.

Ethical issues will be of great concern to me, as I will be dealing with minors. Thus I am going to ask for access from the Ministry of Education and Culture (MOEC), the Head teacher, the students and their parents.
I consider validity and reliability as very important factors in this research and therefore, I will take every necessary measure in designing my data collection techniques and analysing my data, so that I meet these requirements.

The research project is framed by the philosophy of a work based programme, which is characterised by the duality of role as a worker/researcher that will introduce into my work the element of bounded rationality.

Based on the assumptions that an overwhelming majority of students consider Chemistry as one of the most difficult subjects in the educational system and that the curriculum is too rushed, I am hoping that my findings will lead to conclusions, which will address these challenges and not only lead to the retention of students but also to the increase of children taking chemistry as a selective subject. This of course is not very easy, since a significant percentage of students depend their decision on selecting lessons on whether these are examined for university entrance purposes. Therefore I also hope that my findings will contribute towards making the subject of chemistry more attractive to pupils.

The above of course will be made possible if only the MOEC and teachers themselves take into consideration the findings of the research and introduce modifications, instructional changes, and new regulations as to the university entrance examinations.

Last but not least, I am confident that the teaching method Learning at station, which I suggest as a new teaching approach, will have a positive impact on students’ performance.