

Roundtable Discussion Group

Members of the group suggested the following questions for discussion.

- 1.) The place of Analytical Chemistry in the curriculum.
- 2.) Ideas for new buildings.
- 3.) What can be done about ~~problems of~~ delivery from scientific courses when they do not line up to delivery date.
- 4.) What about introductory course for student with no High School Chemistry.
- 5.) What is the future for Liberal Arts Colleges in preparing majors for graduate schools?
- 6.) What is the best way to design a Chemistry Curriculum for Liberal Arts College.
- 7.) The concern for preparation of High School teachers.

The group spent a few moments considering the problem of ~~providing~~ ~~the~~ ~~necessary~~ ~~terms~~ of chemicals and apparatus by scientific supply houses. - Discussion ~~seemed~~ ~~to~~ ~~show~~ ~~evidence~~ that our supply houses seemed to be the offender. Only effective remedy was to contact officer of company who is at high enough level to push order on.

Most of the time was ~~spent~~ ^{spent} to consider the question "Will these Liberal Arts Colleges be able to prepare qualified graduates for entrance into top graduate schools in future years?"

This question was prompted by reports that some university staff members are of the belief that in future the only source of well trained undergraduates will come from the universities.

A report from M.I.T. contains evidence that already the Liberal Arts Colleges are not adequately preparing physics majors. If this is true for physics, will this inadequacy soon be felt in the production of qualified chemistry majors?

A report from University of Illinois made note that the majority of S.A. graduates in Chemistry failed three out of four entrance exams. One member of the group felt the small numbers in advanced classes in S.A. schools did not provide the needed competition to drive student to better work. Dr. Miller of Institute of Paper Chemistry notes that as yet the S.A. graduates are equal to the university graduates in his institution.

^r The ~~the~~ question prompted the following points in the discussion. -

1.) Are the graduate schools expecting too much in the undergraduate level. - Although some of the members of the group wanted to hold down the specialization of the student, others believe the graduate schools are justified in expecting a stronger base than in previous years because of the rapid expansion of the sciences.

2.) Some believe the cause of decline of percentage of S.A. students becoming top graduates in Chemistry may be due to a decrease in the source of such student from H.S. - The question to be answered

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is this — "Has increased tuition cost cut into that economic group from which Chemistry majors appear?"

3.) Is the problem of staffing S. A. colleges in Physics and Mathematics resulting in some bad effects upon the overall training of Chemists as well as Physicist + Mathematicians? Will staff problems in Chemistry increase in near future?

4.) A difference of opinion existed among members of the group about our ~~to~~ need to provide a broad training in the Liberal Arts before specialization. Some believe we are trying to force specialization too early, others believe it must be done but still within the atmosphere of the S. A. College.

5.) Some group ~~members~~ ^{references to} of the source of graduates student in Chemistry as being ~~high~~ ^{chiefly} from S. A. colleges. — Others suggested this may be unimproved data and we should not hold to the past for present evidence.

6.) Has the personal attention point, after made by S. A. colleges as a reason for.

their success with student, been overemphasized. Should we not be careful that personal attention may prevent a student from standing on his own feet.

7.) Some suggested the constant need for curriculum review in S. A. colleges. - One questioned the continued use of 1500 hours to conduct classical laboratory exercises when what might be more valuable is an increase in time devoted to conceptual experiences.

8. The suggestion was made that if a lack of opportunity exists for students to get necessary advanced courses in Academic year curriculum, would it be possible for our students to get such information during summer sessions. - ~~What is the~~ NSF has supported conferences designed for such a purpose in Organic Chemistry at Reed.

9. A question which may need to be answered is how much of a gap exists between the experience of the university chemistry graduates and the S. A. Chemistry graduates and what is the content deficiency.

10. The point was made that although some of S.A. college graduates may not pass qualifying exams as easily as ~~the~~ ^{the} ~~university~~ ^{university} trained chemistry majors, there is no evidence that S.A. people do not have as great a success in ^{the} ~~the~~ end.

11.) Some suggest that S.A. professor may have a greater tendency to get in a rut in his teaching and slower at accepting new ideas. This may be partial cause in lag of training S.A. students modern concepts.

12.) The question was asked "Assuming all things equal in instruction, what would we predict for the outcome of the S.A. student as compared to university student. — If the S.A. is not as well prepared, is it due to an atmosphere which prevails at the university ^{and} which places the student in closer contact with the research front?

13.) Final point was made that no definite evidence was available in the group to indicate that the well prepared

L.A. student would not be successful
 in graduate school. However, further
 study should be made and some attempt
 begun to ~~to~~ obtain factual information about
 this question, ~~at a future date~~. - Possibly
 this problem should be the principle
 point of discussion at a future MACTAC
 meeting. -

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