Chemical Education in Vietnam – Get Ready for Reformation

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ABSTRACT

The contribution comments on articles out of the Vietnamese Newspaper Vietnam News concerning the current educational situation in Vietnam documented by headings of distinctive articles. This will be combined with our experiences in lecturing and researching in Vietnam. Themes related to education and education reformation are discussed in public. The goal is obviously to regard social opinions and to make administrational decisions more transparent. The article also shows our awareness of the educational situation in Vietnam from a western scientific point of view.

Keywords: chemical education, education reformation, communication

TÓM TẮT

Giáo dục Hóa học ở Viêt Nam – Chuẩn bị đổi mới Giáo dúc

Bài viết này bình luận về những bài báo liên quan đến thực trạng giáo dục tại Việt Nam trong Vietnam News qua nhứng chủ đề nổi bật. Ngoài ra các bình luận sẽ được kết hợp với những kinh nghiệm của chúng tôi trong việc giảng dạy và nghiên cưú tại Việt Nam. Những chủ đề liên quan đến việc đổi mới giáo dục được trao đổi trong công cộng. Mục đích của việc này là quan tâm đến ý kiến của dân và làm rõ những quyết định của Bộ Giáo dục và Đào tạo. Ngoài ra bài báo này cũng làm rõ nhận thức của chung tôi đối với thực trạng giáo dục từ quan điệm khoa học phương tây.

Từ khóa: giáo dục hóa học, đổi mới giáo dục, giao tiếp

Discussions Concerning Education in Public Media – Mirror of Education Political Reformation

The ongoing educational offensive in Vietnam that has been initiated by the government of Vietnam some years ago is intensively discussed in public media and has been placed in focus of the peoples awareness. This is our impression by reception articles out of the *Vietnam News* (compare Figure). Basic structures and problem situations like

- the intensive focus on examination during education and training,
- the teacher centered and achievement oriented teaching of subject,
- the dominant focus on theory in school curricula,
- the general neglect of pupils needs,

- the teaching methods oriented teacher training and
- the dominance of receptive activities of students

are presented and reflected in a self-critical way. Readers are getting informed about intended measures of reformation. The 2013 started reformation process aims to break up educational traditions and to change the current education reality. It is planned to complete all reformation measures until 2020. With this Vietnam is engaged to connect to international researches concerning theory and practice of nature science general education and especially concerning the selection of educational contents or contents of educational processes. Intensifying nature science education has a high priority. On the background of

- a positive economical development in Vietnam in the last years,
- the willingness for discussions in terms of foreign policy "in every political and cultural direction",
- the expansion of trade relations and worldwide cooperation and
- the confident appearance in international contexts

changes of educational activities are farsighted. Discrepancies between claims and realities are unavoidable. At present Germany and Vietnam extend their trade and culture relation accompanied by scientific, economical, financial, technological, environment relevant cooperation. There exist a readiness for integrating foreign scientists in universities, also in universities specialized for teacher training and a readiness for mobilizing resources for this.

Chemical Education – Reality and Intentions

In discussions with colleagues in and outside of Ho Chi Minh City, in our seminars and lectures at the HCMC University of Education, in our further teacher training supported by the HCMC education administration and in the frame of our nature science fairs at all educational levels we have noticed that the claim focusing learners in educational practice more is well accepted. On the other hand we have also experienced that the burden of chemistry teachers frustrates implementing following proposal in their own teaching:

- Conceptual diversity, e.g. in the meaning of context or everydaylife orientations
- Intensification of experimental teaching and accordingly pupil experiments
- Problem and application oriented learning impulses
- Boost of self-reliance of the learners in a constructivist way
- Realization of a widening chemistry teaching or rather integrated nature science teaching (compare [1])
- Emotional guided learning impulses in order to awaken interests of the learners

It might be that teachers are still not clearly aware of the intention of the reformation.

Figure: Headings of chosen articles out of *Vietnam News*

Intensive further teacher training should balance this Lack (compare [2]). Financial resources for innovating the educational activities in Vietnam are unequally distributed. Hanoi and Ho Chi Minh City are preferred and they have much better conditions than rural regions. A discussion about academic teaching quality always fixes competences and skills of academic lecturers concerning didactics in higher education.

Teacher training at Universities of Education must face the challenge to consider "new" curricula that are less exam-oriented (compare [3], p.12) as it was before. Teacher students must be trained in respect of didactics in higher education so that

- their self-confidence and their self-efficacy will be strengthen,
- their methodical competences will be extended for effective teaching and
- they will get familiar with learning psychological basics in order to boost thinking operations and to respect emotional requirements of learners.

The methodological research must focus teaching realities more than before. In Anglo-American and West European scientific community well known theoretical aspects like pupil orientation, education and educational processes, learning difficulty, imagination, conception, context, etc. can enrich and optimize the dominant methodical phenomenological perspectives of chemistry teaching (compare [4]). With such an awareness the keyword "Science in practice" must also be implemented into teacher training. "Learn-to-learn-methods" or "creative activities" are popular slogans in the *Vietnam News* articles that fixes demands on teacher behavior for a change of the teaching practice (compare [5]).

Starting Point of the Reformation – Pros and Cons

Insecurity and skepticism concerning a successful application of the reformation is huge. Its pedagogical and didactical necessity is unquestionable. The reformation proposition fix a changing view on the roles of teachers and learners (compare above). Present understandings effected by cultural tradition respect teachers as effective mediator of knowledge who prepares learners for versatile examinations (for the final school examination and especially for the university entrance examination) by teaching in schools or extra classes. Teachers are respected as professionals as they cover the cultural legitimated demand by conveying a fixed canon of knowledge. The abolishment of extra classes in the frame of the reformation does not only mean a break up with these attitudes but also immense financial penalties and a loss of reputation compared to medical scientists or lawyers, etc. In general the reformation is a great challenge for learners to participate actively in class teaching, because they have never learned such behavior. Learners need to get used to it, so the message in some articles in *Vietnam News*.

However the reformation can profit by the fact that chemistry teaching is generally respected in Vietnam (compare [3], p.9) and by the fact that several achievements and won prices of

pupils at international competitions for nature science like Chemistry Olympics. That lead to an enormous enhancement of prestige for the education system. The intensive activity with nature science of young prize winner is an expression of their personal preference, that means high interests are determined by the individual value. Therefore the educational reformation is a great chance in order to awaken and to boost interests of learners by chemistry teaching (compare [4], p.22-28). But it is not predictable in how far scientific standards like the international scientific community represents and claims (compare [6]) will overcome traditional and cultural systems of norms and values. An international didactics that turn out to be a "world didactics" must consider and reflect such situations, if it does not want to contravene its own didactical theorem "conditionality of teaching".

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