

A Proposal for the Revision of the Professional Component of a Program of Teacher Education

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One of the anticipated outcomes of the following proposal is an organized statement of the content and experiences (curriculum) for the professional component of teacher education program which appropriately utilized the new media. The primary purpose of this presentation is a proposed outline for a professional content which ensures a cohesive and integrated plan for teacher preparation. This cohesiveness or integration is related to the issue of *selecting* and *organizing* materials.

Development of Professional Content

The selection and organization of any body of knowledge requires that certain assumptions be made in at least two areas: (1) *learning processes* and (2) *structure of knowledge*. These areas are not complete without inclusion of an area of particular concern which is the (3) use of new *media* in the professional component of teacher preparation.

1. Learning Processes

The implication of the ideas developed in regard to learning processes and cognitive formation are of major importance in the outlining of the professional content. This is based on the assumption that the teacher education student has many and varied exposures to teaching patterns prior to his/her enrollment in the teacher education program. These exposures to teaching patterns have resulted in the formation of certain concepts about teaching and these concepts exist within some sort of conceptual scheme. It has been noticed that these concepts and schemes are likely to be incomplete due to the fact that the exposure of the teacher education student has been limited to his/her position as a learner. The criteria for fitting a conceptual structure has been also limited to the students' own learning behavior styles.

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Thus, the professional education program should give particular attention to the *correction, reorganization and extension* of the conceptual scheme of teaching that the teacher education students already possess.

I have observed that when teacher education students begin their professional work, their concepts of teaching tend to be limited to the classroom situation. They conceived, for example, that the only function of the teacher is to oversee and control a group of students in a classroom. They are likely to consider teaching as telling the learner about a particular subject. Their immediate concerns are not likely to be broad enough to include within their conceptual scheme the teacher as a member of the community or a member of a profession. At this point there are some questions about the teacher education student's deep concern about the school as a social institution or for the child as a learner.

If the conditions outlined above are correct or even partially correct, and the idea of reorganization and extension of concepts is accepted, the first effort in professional education should begin with the concepts that are directly related to the classroom functions of the teacher. As the conceptual scheme of the teacher education student is extended, other concepts may be added.

2. Structure of Knowledge

This is one of the most difficult elements in professional preparation of prospective teachers. The broad and integrated field called education has been segmented into several subdivisions (e.g. educational psychology, history and philosophy of education, curriculum, methods of teaching, administration, etc.) which are nearly autonomous. These subdivisions tend to have a structure that is best characterized by a criterion of internal consistency toward research and specialization within each area rather than criteria related to cognitive learning or professional teacher education. Each subdivision is concerned with a somewhat discrete element within the larger domain of education.

Thus, this proposal with its emphasis on structure of knowledge enhances the organization and co-ordination of all subdivisions in the area of education and permits the emergence of a valuable model for a meaningful curriculum void of any irrelevant courses and materials and clear of disjointed and duplicating activities. This proposal will also benefit the cognate professors who are responsible for teaching prospective teachers the various subject areas. It will give them a better understanding of guides and principles related to the structure of knowledge.

An example of beneficial guides or principles in the structure of knowledge is Bruner's theorems on instruction. According to Bruner the structure of any domain of knowledge may be characterized in these ways, each affecting the ability of the learner to master it:

a. **Mode of representation:** Any domain of knowledge can be represented in three ways

- (1) **Enactive Representation** - a set of actions appropriate for achieving a certain result.
- (2) **Ikonic Representation** - a set of summary images or graphics that stand for a concept without defining it fully.
- (3) **Symbolic Representation** - a set of symbolic or logical propositions drawn from a system that is governed by laws or rules for forming and transforming propositions.

b. **Economy** refers to the amount of information that must be held in the mind and processed to achieve comprehension.

c. **Effective Power:** the effective power of any particular way of structuring a domain of knowledge refers to the generative value of a set of learned propositions. The power of representation can also be described as its capacity, in the hands of a learner, to connect matters that, on the surface, seem quite separate.

Mode, economy and power vary in appropriateness to different ages, to different styles among learners and to the differences in subject matters.

With the professional content for prospective teachers divided and segmented among the several subdivisions of education, an adequate mode of representation appears to be impossible, economy is seriously limited and much of the power of the content is lost. An integrative elements is needed to organize the body of knowledge within the field of education selected as the professional content. The instructional activities of the teacher appear to offer the most significant integration element for content development.

The problems related to the structure of knowledge is further intensified by a lack of clarity of purposes for the larger program components of general education and specialization. According to the proposed program and due to the effort to select and organize the content of the professional curriculum components, some crucial questions needed to be stated:

(1) What is the unique body of knowledge required of the prospective teacher that is not needed by, and essential to the typical or general college graduate?

(2) What elements of this knowledge can best be achieved within an institution's organizational plan for general education, specialized education and professional education?

Since the teacher education student is expected to be a professional employee in the institutional setting of the school and more specifically in a situation

designed to achieve certain educational objectives, the basic criteria for the selection of the professional content should be based on the anticipated teaching functions. The body of knowledge in this domain is obviously unique to the prospective teacher. The domain when approached in this way may be adequately represented, economy effected, and power developed.

The University of Qatar needs to study critically the content of the three components of teacher education program (general, professional and specialization) as are offered by the School of Education. In spite of the fact that this proposal is mainly concerned with the professional component of teacher education, it will provide an impetus for a plan to reorganize the content and develop an effective balance between the three components. It is not intended here to suggest a reduction of the professional component, but the purpose is to reorganize and integrate this segment of the student's preparation in order to allow for more emphasis on the subject areas knowledge and skills which are required of those prepared to be classroom teachers. The lack of knowledge of subject areas have reached a critical point which demands the mobilization of joint efforts of teacher educators and the colleagues in the cognate areas.

(3) Media: The third problem area, the use of new media in teacher education, is partially resolved by the selection of a learning process and a structural basis for the body of knowledge. An instructional system is the integration of the demands of communication, learning and content. Effective development of media demands a substantive element, a process and a clear definition of purpose. Programmed materials makes the requirement an absolute necessity. While other media used individually may allow a greater degree of misuse without serious consequences, lack of substance, process and clarity will minimize their effectiveness. When a media system is developed along with the professional content, it is possible to assist the prospective teachers in developing the most complete conceptual scheme.

The new media have special if not unique value in the preparation of teachers. Some of the persistent problems of time, distance and numbers and environment control are effectively corrected or minimized by closed circuit television, videotape recorders, 8 mm film, etc. Various media provide the means for portraying the real referents necessary for perception. Evaluation of tryout experiences for meaningful feedback on the basis of objective material provides a new dimension for teacher education. A variety of real teaching situations may be recorded for systematic evaluation.

In addition the teacher education student will employ the newer media in his/her own teaching. The basic concept in the selection, use and development of media become a part of the professional content. Media offers a potential for the extension of the professional competencies unique to the teacher as well as higher quality of education for the learner.

Structured Organization of the Program

Based on the above presentation of the three problem areas of teacher preparation (i.e. learning processes, structure of knowledge and new media), the proposed program is bringing these problem areas together in a guide of five prototype learning units designed for a cohesive and integrated plan in teacher education. These units are not the present time traditional courses, they are instead a model for organized and meaningful activities which may be expressed in different forms and shapes to fulfill the goals of an effective teacher preparation program.

The relationship of the terms used in the drawing may be written as follows:

A learning unit in a given content area develops an interactive relationship among *content* which is expressed as concepts, symbol and verbal patterns, and performance abilities for the desired *behavioral objectives*; *learning processes* which involve perception, restructuring and thinking, decision-making, tryout and feedback, memorization and practice of overt acts, and *materials* in the form of real referents, media or diagrams for portraying referents, means for recalling, past acquired perception, tryouts or simulation, related verbal materials, and/or practice situations.

The Scheme

Each unit is represented in a scheme which demonstrates both integration and organization of *theory*, *Process* and *Practice* situations. These units are also organized in a sequential fashion to ensure a gradual induction into the teaching profession.

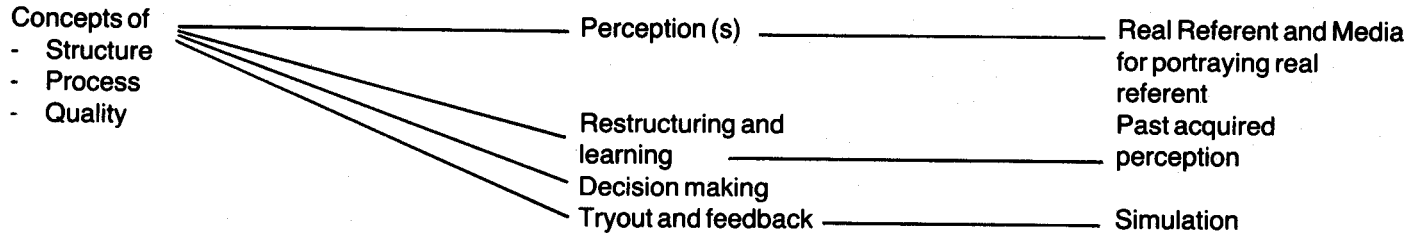
Summary

Before considering some of the implications of this proposal, the position statements about the approach should be reconsidered.

- (1) Teaching demands that teachers make a variety of choices.
- (2) The teachers' concepts within a conceptual scheme are the basis for his actions.
- (3) A given domain of knowledge may be represented enactively, iconically and symbolically. The body of knowledge may be characterized by its representation, economy and power.
- (4) The organization of knowledge and instruction requires an assumption about learning.

The design for each unit is as follows:

Content _____ Learning Process _____ Materials



Symbols and or/verbal patterns _____ Memorization _____ Verbal materials,
terminology, date.

Performance abilities _____ Practice of evert acts _____ Practice situation,
or equipment

Elements of an Instructional Unit

Scheme of the Proposed Units



I. Analytical study
of Teaching:
Assumptions and Purposes.

1. A concept of Teaching
2. Paradigms, Models for Teaching.
3. Concept from Research in teaching:
 - a. Interactive Analysis
 - b. Pedagogical Moves and Teaching Cycles
 - c. Logical aspects of Teaching.
 - d. Concept of Teaching strategies.
4. Non-verbal Communication in the Classroom.
5. Assessment of the Social Emotional Climate in the Classroom.
6. Study of Classroom as a Social System.
7. Leadership style.

Teacher's Aids
Level I:
Observing and
Assisting
teachers in
simple tasks.

Theory _____ Process _____ Practice Situation

**II Structure and Uses
of Knowledge**

1. Determinants and
Uses of Knowledge
2. Logical Structure
3. Structure and Form
of Knowledge
4. Meaning of Subject matters
5. Logical Aspects of Teaching
6. Analysis of Content

Teacher's Aide
Level II
Tutoring and
assisting teachers
in preparing
context and
materials.

Theory _____ Process _____ Practice situation

III Concepts of Human
Development and
Learning

1. Structure of Intellect
2. Cognitive Growth
3. Concept formation
4. Cognitive learning styles
5. Inquiry Training
6. Readiness and Motivation in learning
7. Evaluation of learning

Teacher's Aide:
Level III
Diagnostic tasks
of Tutoring.
Assisting teacher
in diagnosis,
Presumption and
evaluation

Theory _____ Process _____ Practice Situations

IV Designs for Teaching
Learning

1. Teaching Strategie
2. Learning Unit Design
3. Formation of Objectives
4. Instructional System
5. Programmed Instruction

Teaching Practice:

Limited situation

- Prepare lessons

- Develop units

- Teaching

responsibilities

on a limited

scale

(one class per day)

Theory

V Demonstrator and
Evaluation of
Teaching Competences

Process

1. A review of Teacher behavior
2. Selecting and Planning Trial experiences
3. Analysis of demonstrated competencies
4. Theories of Instruction and teaching
5. The Professional

Practice Situation

Teaching Practice full scale (Internship)
Demonstrate his/her competence is a number of behaviors, evaluate the demonstrated competence and plan for his professional growth (Teacher competencies become the criteria rather than time).

- (5) The usual course of intellectual development moves from enactive through iconic to symbolic representation. Concept formation may also be described as beginning with perceptual intake, differentiation, organization, decision-making, tryout and feedback to intake.
- (6) The forced fitting of the professional content of a program of teacher education among the existing structures of the subdivision of the broad field of education voids the possibilities for representation and reduces the economy and power of the content to a very low level.
- (7) The professional component of a program of teacher education should be concerned primarily with the body of knowledge that is demanded of the teacher education student rather than the knowledge required of other college graduates.
- (8) The effective organization and sequencing of a body of knowledge requires an integrative, centralizing or focusing element. For the professional content of a program of teacher education this element can and should be the instructional activities of the teacher.
- (9) The effective employment of media in teacher education and teaching is dependent upon clarity of purpose, and assumption about learning and content.

Implications of the Proposed Content

If the direction of change is correct and major change in the program is possible at this time, some of the problem areas to be considered are the following:

(1) Materials:

The present and current instructional materials will not meet the demands of the proposed professional curriculum. Materials now in use have been developed within the dimensions of the structure of disjointed subdivisions of the field of education.

To realize the potential of the proposed content outline new materials that capitalize on the potential of the concept of an instructional system approach will be needed. The task can be achieved through an intensive development and organization of content on the basis of the suggested units in proposed scheme.

(2) Staffing:

The present personnel in teacher education have the basic preparation and experience necessary for the professional preparation of teachers. The proposed content outline appears to favor a team teaching approach or gives

emphasis to the generalists rather than specialists on a first review. A more careful study indicates that one of the staff problems will be that of reorientation. The personnel now qualified for instruction in the psychological foundations area should be qualified for the content outlined as *Concepts of Human Development and Learning*. The Foundations of Education people are qualified to deal with the proposed unit designated as *Structure and Uses of Knowledge*. The curriculum methods and student teaching staff with the help of media personnel should be effective in the *Analytical Study of Teaching, Design for Teaching Learning and Demonstration and Evaluation of Teaching*.

Since the proposed content is more highly organized than the existing program, there is a possibility of conflict between the teacher educator's teaching assignments and his personal research and specialization interests. Yet this conflict would be minimized because this revised proposal will generate a new research potential which should challenge the specialist.

The quality of instructional material developed should assist in the solution of such staffing problems that may arise. Another possibility for minimizing staff problems would be regional conferences of staff development. (P.S. The Regional Office of UNESCO which is located in Qatar should play an important role in such a task of reorientation of the teaching staff).

Facilities and Equipment

The proposed content outline will increase the demands for facilities and equipment. The effective development and use of media will demand a variety of media and their housing.

The videotape recorder and its auxiliary equipment is emerging as an essential item. Facilities for the development of instructional materials will be needed. It should be noted that all the equipment and facilities will have a potential for research, in-service education and for graduate programs.

Schools - University Relations

The revised content will place new demands on the relationships between the schools and the University. The criteria and procedures for selecting co-operating teachers and the assignment of teacher education student will need to be restudied. The schools and their professional staff will need to assist in the development of recorded instructional materials and the co-ordination of the practice situations. Co-operative planning should receive new emphasis.

Conclusion

The problems that have been identified to not appear to be insurmountable nor should they distort the basic purpose of the content revision - the improvement of teacher education. Improvement is dependent upon the quality of the content of the professional component of the program of teacher education.

At some time in the history of teacher education a dichotomy between talk about schools and teaching and practice developed. The talk about teaching and schools has for a number of years been correctly considered theory. The information about education has a certain value but an estimate of its value is dependent upon a "for what" question.

The notion of practice is a far too limited concept for the development of a high level teaching competence. If it was actually possible to assign all prospective teachers to outstanding experienced teachers, the superimposed effect of imitation or mimicking reduces the possibilities for individual professional growth. A further limitation within this dimension is the random nature of the possible experiences. There is a lack of design and control.

The professional component of a program of teacher education for a long time has taken for granted that the teacher education student will put together the talk about education and his/her teaching. The latest research in teaching and work in theory indicates that this is an extremely difficult task and that an assumption of this magnitude is more likely to be false than true.

The basic strength of *this* paper at *this* time may not be either the rationale or suggested content but the alternatives proposed by others.

An Action Plan

To ensure an effective implementation of the proposed programme as represented in the scheme, I may *recommend* some plan of action to be considered by Qatar University authorities.

1. An immediate establishment of a *Teacher Education Committee* on the *University level*. Members of such a committee should include representatives of the School of Education, all academic departments, the alumni of the teacher education program, and the Ministry of Education. The Committee should be empowered to implement the new plan, develop a criteria of admission to the teacher education program, periodically review the program and develop a systematic evaluation of the graduate. (P.S. It is preferable to let a member of the academic department rather than School of Education to chair this committee).

2. The teaching staff of the School of Education should be organized in special task forces to deal with each unit as suggested in the plan. Each task force will be composed of representatives from each department within the School of Education. Besides the responsibilities to develop each unit, the task force will fulfill the goal of breaking rigidity of organization and disjointedness of departments within the School of Education.

3. Establishing a campus Pilot School to serve as an experimental ground for some of the activities suggested in the proposed plans.

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