

## **Teacher/Administrator Preparation for Education in the 21st Century**

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[Editor's Note: This article, while essentially theoretical, is a compilation of many, many "voices from the field," thus its rightful place in *JPACTe* is in this section of the e-journal. It's outcomes and recommendations are as useful today as they were when first elaborated ten years ago.]

### **Abstract**

Based upon interviews with 250 cutting-edge teachers, administrators, parents, students, staff developers, and university instructors at the 1996 Constructivist Design Conference in Grand Island, NY, recommendations were prepared utilizing a framework of seven categories for consideration: collaborative planning, field experiences, diversity, training as facilitators, contemporary approaches, assessment, and reflective practice.

### **Introduction**

Educational historians of future generations will look back on the late 20th century as a time when educators began the slow, institutional transformation away from rote behaviorism, closed definitions of intelligence, and hardened perceptions of a singular, static, 'given' structure of knowledge. Initiated in the work of Jean Piaget, the guiding term for this cognitive revolution is constructivism.

(Hyerle, 1996)

The education department at Niagara University was solicited by the program developers of the 1996 constructivist Conference in Grand Island, N.Y. to prepare an outline of suggestions for how schools of education need to adapt in order to prepare teachers and administrators for the schools of the 21st century. During work sessions, a framework was developed to organize the various

recommendations/suggestions offered by the conference attendees. Thus the following seven items, based on individual interviews and a mass-distributed survey to conference attendees, emerged and is presented in this article. The items include 1) collaborative planning, 2) field experiences, 3) diversity, 4) training as facilitators, 5) contemporary approaches, 6) assessment, and 7) reflective practice.

### **1. Collaborative Planning**

Collaborative planning within and across department(s) is necessary in order to develop a core of course and field experiences in keeping with the university mission to promote teacher and administrators preparation for work in the schools of the 21st century. A core of courses with field experiences should be developed to include essentials such as:

- Methods
- Education for learning
- Human development
- Assessment
- Individual differences

This core forms the essence; to varying degrees other necessary components such as philosophy, technology, history, problem solving/critical thinking and reflective professional development are included within the core program. The inclusion of these components is addressed through regularly schedule collaboration sessions among faculty in order to capitalize upon the expertise of each instructor. Collaborative activities might include sharing syllabi, discussion of issues and concerns, and continual reflection of past practices.

In addition to the pre-service preparation of teachers and administrators the education department must be committed to the continual development of practicing professionals. Faculty should serve as educational facilitators by engaging in activities such as inservice workshops and consultations.

## **2. Field Experiences**

One recurring theme at the conference was the need for more field experiences, both in schools and in business. Descriptors toward this end were: early, many, varied, part of the coursework, and culminating in an intensive experience. From a constructivist perspective, these kinds of experiences are valuable because people “earn by doing” and assessment is more than “pencil and paper test.”

- A variety of related suggestions emerged and are presented below. Field experiences should:
- Be sequential and integrative
- Allow students the opportunity to observe successful teachers/administrators
- Help provide a bridge from the university to the community/schools
- Serve to improve student efficacy, as early experiences will provide a basis for later experiences (e.g. student teaching)
- Provide basis for reflection, and enable students to tie theory to practice
- Expose students to current trends in the community/schools
- Expose student to a variety of experiences and the “big picture” such as diverse populations and other aspects below

## **3. Diversity**

Becoming a successful teacher or administrator at the turn of the century requires a dedication to and understanding of human diversity in its many and varied forms. Differentiated student characteristics such as ethnicity, age, IQ, SES, sexual preference, gender, religion, height, native language, and physical

ability provide incredibly powerful learning recourses for the creative constructivist teacher. Heterogeneity is a strength in active classrooms that stress student interaction and collaboration, student initiative and responsibility, and which promote democratic structures.

New Teachers and administrators should experience and celebrate diversity both in their thoughts and in their deeds. They should reflectively examine a strong research base as it is used in their own university classes and in the classes they engage in, in the public schools. Within this knowledge base are the following:

1. Vygotsky's (1962) suggestion that deep understanding is tied to student discussion
2. Kohlberg's (1963) suggestion that moral development results from diverse perspective discussions
3. The Johnson's (1981, 1989) suggestion that appreciation for different points of view arise from constructive fact to fact controversy;
4. Slavin's (1986) suggestion that toleration and racial/gender harmony is built from teamed collaboration for a common goal
5. Gardner's (1983-1995) theory that there are (at least) seven distinct intelligences, i.e., seven ways for a human to be smart. This diversity of intelligence suggests that teachers are personally diverse and have much to gain from collaboration. The same is true for students
6. Banks' (1994) suggestion that the world is seen as stronger when it is seen in its multicultural perspective
7. Cohen's (1994) suggestion that students' projects are more beneficial when they are complex and when they tap the diversity that is required by their analogues in the real world...and in the world of work
8. Brook's and Brook's (1993) suggestion that student teachers and their students have much to gain by "engaging in dialogue," "questioning each other," and "facing contradictions to their hypotheses," obviously, diversity is *necessary* to fostering these conditions of challenge

Respondents at the conference offered supporting sentiments for the view that diversity is both a positive and an important factor to new teachers:

“We must make teachers into facilitators of learning, using learner’s different knowledge and experiences.”

“Students are not empty vessels; they have a personal (and diverse) knowledge basis.”

“University programs must promote self-reflection AFTER collaboration, so that teacher candidates come to value the differences among their fellow candidates.”

“Teacher education must get novices into real classrooms with real kids early, so they see the reality of diversity.”

“Discovery and experience are teaching tools that take advantage of students (diverse) backgrounds.”

“ALL teachers need to deal with all levels of education...all students are special.”

#### **4. Training as Facilitators**

The role of the teacher and administrator of the future requires skills as facilitator and team builder. To accomplish this enormous task requires instruction and experience with a variety of target groups under varying conditions.

**Team Concept.** The teacher/administrator needs to reconsider the top-down style of leadership which may alienate or exclude parents, teachers, and administrators. Shared decision making allows groups to meet as equals to discuss and brainstorm relevant issues. No group or individual usurps all power. Team teaching incorporates both teach concept and the collaborative process.

**Collaborative Process.** Increased diversity teamed with decreased budgets encourages collaboration through desperation. Integrated curriculum, inclusion, multi-grouping, scheduling, and school to work initiatives require teachers to collaborate with other teachers, parents, administrators, therapists (speech,

occupational, and physical), teacher assistants, and business leaders. Teachers and administrators need to bring the outside world in to the schools. Historically, special programs for students were “pull-out” programs. They now “push in” to bring services and information directly to the student. Precious classroom time is saved by minimizing transport time. Resources are better utilized as remedial teachers are available to help several students in the classroom, rather than pulling students from class one or two at a time.

Administrators collaborate with business leaders and parents to encourage community involvement and use of community resources. Guest speakers serve to inform both staff and students to increase general knowledge as well as provide important occupational information. Technological advances in the world of business can be shared more quickly with school to business partnerships. Inter-active learning is enhanced through these partnerships.

**Mentoring.** Mentoring is implemented on all levels: administrator/teacher, teacher/administrator, teacher/teacher, teacher/student, student/student, community/school, school/community, and any other possible combination. The mentoring model allows knowledge to be disseminated between pairs. In a constructivist classroom, while students work independently, the teacher coaches or mentors the student while constantly monitoring and assessing the progress and process. Therefore, mentoring needs to begin at the college level, through professor/student dyads, designed to evaluate as well as teach the art of mentoring.

**University Program.** The task of the university then is to ensure that the basis of classroom networking is begun on the college level through coursework which includes group work (cooperative learning), experts in the field (both in and out of education), increased field work, and the development of instructional units which incorporate the work of other sources.

### **5. Training in Contemporary Issues/Approaches**

Emergent trends are an important component of the education of teachers and administrators. Students in departments of education should be prepared to discuss, evaluate and implement evolutionary ideas. A constructivist approach to such preparation might include coursework in which students are required to research and discuss recent developments in education, field experiences where new programs are being implemented, and seminar classes in which students discuss observed prototypes. At the constructivist conference suggestions about contemporary training included:

- Behavior modification techniques
- Thematic units
- Interdisciplinary instruction
- Portfolio assessment
- Block scheduling
- Multi-age grouping
- Inclusion
- Cooperative learning
- Multiple intelligences
- Learning styles

As these issues and approaches pass the test of time, some will become central parts of the core coursework, making way for new trends in the field.

## 6. Assessment

While traditional assessment (e.g. pencil and paper tests) will most likely continue, a growing number of educators strongly advocate authentic assessment in which students demonstrate knowledge in a manner consistent with its actual use (e.g. portfolio assessment). Thus, students at colleges/universities should understand traditional assessment and that there is a movement toward non-traditional assessment. Aspects of a more non-traditional approach would include: a larger range of student abilities being viewed (assessed), more student involvement in the assessment, the possibility for including ability variances among students, teachers and students collaborating in the assessment process, and a focus of assessment which involves the people in general who were more supportive of authentic assessment and suggested/recommended that it be taught and followed by colleges and universities involved in the preparation of teachers and administrators. In addition, the administration of the colleges/universities should use authentic assessment regarding the faculty and staff.

## 7. Reflective Practice

*“How did that go?”*

*“How could I have done it differently?”*

*“How did the people feel as the session moved on?”*

*“Which participants were disengaged? Why?”*

*“If I’m ever in that role...will I act that way?”*

*“What was happening that made task #1 hard...and task #2 easy?”*

Reflection has become a staple in the lives of teachers and administrators.

These questions and many more like them help novice educators make the most meaningful sense out of the varied experiences during teacher preparation days.

They must be asked and answered frequently and honestly if maximum professional growth is to be realized.

Analysis and reconstruction are fundamental to change, and they have only been seen as essential for a short time. Pre-service educators cannot count on learning this skill (and attitude) while on the job. It must be incorporated into their daily routines early in the preparation process.

In conjunction with colleague collaboration personal reflection pushes novices to make new insights, test inferences and analyze diverse perspectives. When combined with enriching experiences as listed below, novice educators will have thought more productively prior to their first jobs, thus maximizing their potential to grow in their careers.

Teachers/administrator education programs should do everything possible to provide these experiences as “reflection opportunities” to novices:

- Attendance at conferences
- Portfolio
- Tutoring and mentoring
- Field observation and participation
- Conducting of research
- Evaluating current journal articles
- Meeting with parents
- Assisting with students of all abilities
- Reading of student papers and projects
- Interviews with teachers

Moreover, candidates should record their reflections in journals or logs, providing data for further reflection by self or others. Finally, a life plan should be initiated

early in the program so that novices can begin to develop coming strategies that will aid them in being effective without burning out. Enthusiastic novices must learn to balance all their varied professional and personal responsibilities if they are to survive to help students over the next decades.

### **Conclusion**

These seven items can be viewed as a framework which outlines some necessary adaptive components for how schools of education can prepare teachers and administrators for the schools of the 21st century. Some colleges/universities are already implementing many of these ideas, but the feedback at this conference suggests that all programs can continue to develop in each of these areas.

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