ABSTRACT
        This paper examines the feasibility of delivering
graduate level education courses using student-designed curricula. A
total of 56 students in three different graduate education courses
were given the option of following the instructor's syllabus or
creating their own course. Students in the "History, Foundations, and
Philosophy of Education" course unanimously decided to design their
own course, while students in the "Interpreting Educational Research"
course, with hesitation on the part of a few students, also sought to
determine their own direction. Students in the "Contemporary Issues
in Education" course, however, were deeply divided over how to design
the course on their own and ultimately decided to follow the
instructor's syllabus without change. The results of pre- and
post-course assessments of course content mastery, student
evaluations, and audiotapes of course sessions indicated that
students in the student-designed courses tended to exert more
ownership over the course, demonstrate more involvement in the
course, and feel a greater sense of accomplishment than students in
the instructor-designed course. Student achievement in all three
courses was comparable. Two appendixes indicate the number and gender
of course participants, pre- and post-course assessment results, and
a pre-instruction self-rating form. (MDM)

Running head: STUDENT-SELECTED CURRICULA

Efficacy of Student-Selected Curricula

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Efficacy of Student-Selected Curricula

This paper examines the feasibility of delivering graduate level education courses using student-designed curricula. The objectives of the study were to implement an innovative way of delivering course content, to examine effects on student achievement and attitudes toward the courses, to examine factors which encourage or impede students in self-determining curricula, and to encourage students to experiment with student design of curricula in their own classrooms.

The theoretical framework of the study is rooted in the Deweyian tradition and constructivism, with the interesting addition of elements of chaos theory (Hough, 1994). The basic premise is that curricula are developed and disseminated linearly, but that humans do not typically learn in a linear fashion. Therefore, curricula soon depart from the preferred manner of learning, resulting in loss of student interest or even alienation of students. Few would argue that enhancing student interest is beneficial to learning, but according to Hough (1994) linear curricula are antithetical to retaining student interest. Rather, students should be allowed to follow their own lines of inquiry in learning, thereby making standardized curricula obsolete.   Echoes of Dewey reverberate:

> If the subject-matter of the lessons be such as to have
> an appropriate place within the expanding consciousness
> of the child, if it grows out of his own past doings,
> thinkings, and sufferings, and grows into application
> in further achievements and receptivities, then no
> device or trick of method has to be resorted to in
> order to enlist "interest." The psychologized _is_ of
> interest--that is, it is placed in the whole of

conscious life so that it shares the worth of that
life. But the externally presented material, conceived
and generated in standpoints and attitudes remote from
the child, and developed in motives alien to him, has
no such place of its own. Hence the recourse to
adventitious leverage to push it in, to factitious
drill to drive it in, to artificial bribe to lure it in
(1902, p.27).

If students are allowed to formulate the curriculum from their

own experiences, then one might expect heightened interest in the

course, resulting in more meaningful learning.

Requiring students to formulate and address learning tasks

that are meaningful to them is at the heart of constructivism:

Helping students or groups of students to clarify for
themselves the nature of their own questions, to pose
their questions in terms they can pursue, and to
interpret the results in light of other knowledge they
have generated is the teacher's main task (Brooks &
Brooks, 1993, p. 30).

This approach is at odds with the prevalent practice in graduate

education, in which the professor enters the first day with a

well-defined syllabus. The syllabus delineates specific tasks to

be accomplished within his or her own arbitrary timeline,

outlines the topics to be discussed, and sets forth the standards

for evaluation. In effect, the professor has constructed the

understanding for the students based on his/her own knowledge of

the discipline, without regard for the students' prior

experiences or interests, which are still largely unknown to the

professor at the conclusion of the course.

Departing from the tradition of providing an explicit

syllabus in favor of allowing students to shape the course is not

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without its hazards, however. Students have been conditioned to
expect that the instructor will determine the pace, content, and
desired outcomes of instruction. Some find it threatening to
have more freedom, or are so focused upon grades as to be afraid
to take risks which they feel might jeopardize their grade point
average.

> Students who have been successful memorizing material
> have difficulty adapting to a course that demands
> independent, creative thinking and values asking
> questions as highly as answering them (Jacobs, 1989, p.
> 45).

Would these barriers negate the benefits of relating learning to
personal experience and interest?

In this pilot study, we sought to allow the students certain
freedoms in determining the direction of the course and thereby
give them responsibility for their own learning. Our research
question is as follows: What will be the effects of student-
designed curricula in graduate level education courses on
achievement and attitudes toward the course?

Method

Participants

Students (n=56) from three different graduate level courses
(History, Philosophy, and Foundations of Education; Interpreting
Educational Research; and Contemporary Issues in Education) were
involved in the study, with two different instructors. All
students were pursuing master's degrees in education at two
different small private colleges in the Northeast during the
summer and fall semesters of 1994. The ages of the students

ranged from mid-20's to mid-50's. The number of male and female students in each course is summarized in Table 1. The ethnic backgrounds of the participants were 96% White, 2% Black, 2% Latino. Approximately one-third of the students were non-traditional students involved in a career change.

Procedures

A multiple case study was undertaken on a pilot basis in which graduate students were allowed considerable latitude in constructing the curricula. Certain constraints were placed upon them in order to meet institutional requirements for granting credit: specified outcomes were to be met, grades were to be given, and the required number of class hours were to be completed. It was realized that these constraints compromised to some extent the implementation of student-selected curricula as intended by Dewey and Hough; however, the introduction of such a system in only one course of a sequence demanded some assurances that expected competencies be acquired.

After a short period of introductory activities, students in all three courses were asked to read an article (Hough, 1994) describing the inconsistencies inherent in pre-planned curricula. Students also completed a pre-assessment of their current mastery of course competencies. During the next class period, this article was discussed and critiqued, and two options were given the students: following the instructor's syllabus or creating their own course. In either case, students would be expected to accomplish course competencies established by the graduate

program.   If the students chose to direct their own learning,
they were allowed to determine the assignments, the importance of
each assignment, the structure of classtime, the schedule, the
methods of learning, and the grading criteria.   The students
debated both options, sometimes engaging in very heated
discussions.

In the History, Foundations, and Philosophy of Education
course (Course #1), students unanimously decided to take
responsibility for directing their own learning.   They discussed
the areas in which each student had a particular interest.   They
determined how their interest areas intersected with each other
and explored various ways of presenting their information.   The
interest areas were examined for ways in which they could assist
the student to meet all of the course competencies.   They decided
on a product--a bound compilation of student papers--to be used
as an evaluation of their learning.   The students then worked out
a schedule for accomplishing their self-imposed tasks and
discussed the instructor's role.   Class periods were devoted to
carrying out a variety of activities: library research,
critiquing each other's work, instructor-led discussions of
competencies not fully covered by their work, and debriefing of
the entire process.

In the Interpreting Educational Research class (Course #2),
students decided, with hesitation on the part of a few students,
to determine their own direction for the course.   The students
asked for additional direction in the types of activities they

might undertake, giving the reason that the field was completely new to them and they did not even understand all of the vocabulary on the list of competencies. The instructor and the students then negotiated strategies with which the students felt comfortable for attaining the competencies. The methods for fulfilling each competency were decided separately. All students would complete a written critique of a piece of educational research and small groups of students would plan, carry out, and present to the class an original study on a small scale. The students wished to have the instructor take responsibility for presenting information and application activities on elements of effective research, the major types of research, threats to validity, and interpretation of statistics. Students and instructor cooperatively planned the schedule, in which a portion of each class was devoted to small group work on their research studies, with the instructor acting as facilitator. Together, students and instructor created a scale of evaluation and criteria upon which products would be judged.

In the Contemporary Issues in Education course (Course #3), although students embraced the theory of self-determining curricula, they were unable to apply it to themselves. They engaged in lengthy, heated, frustrating debate, during which several issues salient to contemporary education were considered. Initially, most of the students were excited about the possibility of charting their own course, and in the first vote the instructor's syllabus was discarded. The student-proposed

alternatives to the syllabus divided the students into factions and they were then unable to agree to an acceptable plan of action. The resulting frustration ultimately led the students to vote to accept the instructor's syllabus without change.

Thus, there were some differences among the three courses. Students in Interpreting Educational Research chose more "traditional" methods of learning, electing to listen to lectures and write a standard critique of a research article along with a more creative approach to learning the different types of research. Students in the History, Foundations and Philosophy course were more independent in their learning, choosing personally meaningful topics to explore and collaborating on a class "product." After considerable discussion, students in the Contemporary Issues course elected to yield to the instructor's direction.

Data Collection and Analysis Techniques

Qualitative methodology was used in the study, supplemented by a small amount of quantitative data. Data collected included pre and post assessments of mastery of course content (in varying formats according to type of course), audiotapes of several course sessions, course evaluations by students, fieldnotes of class sessions, and written and oral reactions of students to the experience of constructing their own curricula. Qualitative data were analyzed using analytic induction and constant comparison, and dependent t tests were run on pretest/posttest comparisons.

The pretest for the History, Philosophy, and Foundations

course consisted of the final exam given the previous semester.
For the other two courses, students were given a self-rating
scale on which they assessed their own mastery of course
competencies (see appendices 1 and 2) on the first and last days
of class. Numerical values were assigned and pre and post means
were calculated.

Results

With respect to pre/posttest data, there was a statistically
significant improvement in mastery of course content between
pretest and posttest for Courses 2 ($t=13.10$, $p<.001$) and 3
($t=7.10$, $p<.001$; see Table 2). No statistical tests were
conducted for Course 1 since the n was only 6.

Since there were differences in the qualitative results from
the three courses, each will be discussed separately. In course
1, students felt that they had more ownership of the course and
that the course content had become personally relevant.

> I feel like we worked toward things that we felt were
> important, instead of wasting our energies on filling
> in blanks, rote memorization, etc. (Student #1)

> I feel it (my learning) has been much more worthwhile
> than most classes because our discussions reflected
> experiences and information relevant to the 'real world
> of teaching' situation (Student #2).

These students felt rewarded by having the opportunity to
investigate topics of their own interest, which made the course
more meaningful. This sentiment reflects the intent of
constructivist curricula.

A second category emerging from this course was the feeling
of greater involvement on the students' part. Students reported

working harder than in traditional courses, devoting more time to the course because of increased interest, conducting more research, and consulting more varied resources than the textbook.

> I worked my tail off. At first, I had so many things I was interested in, I used 4-5 precious days with the resource books, trying to narrow my topic (Student #3).

> I feel I did more work because I was interested in the subject and wanted to know more (Student #4).

> I learned more in this class because I was very involved...I enjoyed this class. I feel that I learned more by doing research on my own as opposed to someone lecturing day after day (Student #5).

As Dewey suggested, the students learned by doing rather than by listening. Being responsible for their own learning spurred them to work harder than in a traditional class.

A third and closely related category that emerged in this class was an overall feeling of accomplishment on the part of the students. They were very proud of their final product, making extra copies to distribute to their friends and coworkers.

> I was responsible for what I learned and and produced. The fact that the class was working together on a group project made me feel more responsible for my work (Student #2).

The students had set a goal for themselves and were gratified at meeting it.

An unanticipated result of the course was a feeling of cohesion and camaraderie among the students. Students reportedly met outside of class, helped each other locate resources, learned from each other, taught each other from their own expertise, and gained academically and personally from the experience.

In course 2, the categories <u>increased ownership</u> and <u>increased involvement</u> emerged as they had in course 1.

> I felt the class was more my own (Student #1).

> I put more time and effort into the project and paper than I ever would have studing [sic] for a test (Student #2).

> I think that students will put more effort into a class they helped to put together (Student #3).

This type of comment was representative of a majority of the students (21 of 23). Most students appreciated the opportunity to have input and took advantage of the chance to direct their own learning.

One aspect of course 2 that was felt to be an obstacle was <u>lack of time</u>. Since this was a five-week summer course, students felt pressed to complete their projects within the time span. This was exacerbated by the sentiment on the part of a few students that the organizational aspects of deciding the structure of the course consumed too much time.

Several students also mentioned that at first they were hesitant about the freedom given them:

> I was not excited about the way the class was structured at first, but I was pleasantly surprised to find that it worked well for me--I feel that I learned a great deal (Student #4).

> I was leary [sic] at first of the 'new structure' but I was pleased with the results and I liked having input (Student #5).

It seemed that students were suspicious of the freedom they had been given and did not quite trust the instructor to abide by her word to let them structure the class. They were pleasantly

surprised that they learned as much as they did.

Two students were negative in their evaluation of the process and of the course in general, and did not feel as if they learned as much as in a traditionally structured class. Another student felt as if the small group in which he/she worked was not democratic in listening to all viewpoints.

In course 3, the main category which emerged from the data was <u>frustration</u>. Many students were frustrated with the process, the perceived lack of structure, and with their fellow students. Following are quotes which represent each type of frustration:

> I became uneasy and frustrated rather quickly. It became apparent that each of us has a specific agenda we prefer to follow. I feared a satisfactory resolution would not be found quickly (Student #1).

> I found the process to be frustrating. I liked the idea about opening up the possibility of choosing our own coursework. However, seeing how some angry, frustrated, and 'turned off' people became made me begin to think NO FREEDOM of choice was the only solution (Student #2).

> ...I don't think anyone was really listening to anyone at that point. Egocentrism had taken over and watering down the course seemed to become the issue (Student #3).

> I was pleased that we were given the opportunity to decide what the curriculum was to be. I was disappointed, however, with the amount of 'posturing' and combatitiveness [sic] of my classmates (Student #4).

It appeared that frustration led the students to give in and accept a structured plan rather than expend the effort to create a plan that would be acceptable to all. In effect, they gave up their freedom and abdicated responsibility for their own

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learning.

A second category that emerged was <u>skepticism</u>. A few students were unable to accept that the instructor would allow the students total freedom:

> ...I did not feel that we had total freedom as we had been told we would ...I wasn't quite sure what you wanted from us (Student #5).

Students still looked to the instructor for what <u>he</u> wanted, not able to believe that he had no preconceived plan. Some students seemed to have been conditioned to expect total guidance from the instructor with no choice on their part.

Skepticism was also demonstrated in the effort on the part of some to create their own curriculum just to avoid certain requirements, such as exams or papers:

> I have never seen so many people who were afraid of a multiple choice test! I would rather take a test like that than write a paper. I teach all day, am taking 2 graduate classes <u>and</u> have a life. I don't have time for the paper and presentation, given the choice (Student #6).

> ...I do not like multiple choice tests, so I voted to make a new syllabus. I do not mind papers or group presentations (Student #7).

These students saw an opportunity to make the course easier on themselves, rather than an opportunity to make the learning more personally relevant or challenging. In other words, they were trying to "work the system" to what they saw as their advantage-- saving time rather than pursuing learning.

Other students, however, expressed <u>engagement with the process</u> and were disappointed in losing the opportunity to

fashion their own curriculum.

> I was greatly disappointed that so many people were not
> interested in pursuing an alternate syllabus for use
> this semester. What annoyed me the most were people
> who wanted to leave the class or didn't participate at
> all in the discussions, the process. If you don't
> become involved with areas that can have a direct
> effect on you (where you and I are the 'consumer') then
> you have to be content with mediocrity...(Student #8).

> I felt that we, as a class, let a golden opportunity
> slip through our fingers (Student #9).

These students wished to take an active role in shaping their

curriculum and were ready to accept challenge. Many of the

students who expressed this sentiment also found the process of

trying to create their own curriculum valuable and analogous to

real-life situations.

> I loved the process of trying to determine if our class
> syllabus was to stay intact or not. This is because I
> must go through the same process every week with other
> departmental heads in my field of endeavor. Through
> this process at work, I have learned to stand up for
> what I believe, compromise, brainstorm, and developed
> other skills needed to keep my department productive,
> efficient, motivated, and open (Student #8).

> The ...frustration, annoyance, and anger were not
> emotions or feelings that, in my experience, [were]
> atypical of a large number of teachers trying to reach
> agreement on such an open-ended topic (Student #10).

It seemed that students who had had life experiences that had

shown them the value of such a process were more willing to

undergo the necessary work to create a cooperative plan.

Discussion

So, then, what was the effect of student-designed curricula

on achievement and attitudes? With respect to achievement,

students judged their own learning in student-directed courses to

be equal to or greater than in traditional courses. The instructors believed that the achievement in these courses was as high or higher than in previous semesters taught in the traditional way. One cannot simply compare posttest outcomes for traditional vs. student-centered curricula; students in the self-directed courses did not choose to complete posttests.

For the most part, students who chose to create their own learning experiences were very favorable toward the experience and toward course content. It should be noted that even those in course 3, who chose the instructor's syllabus, were allowed to make that choice. Some students felt uncomfortable with the idea of freedom in directing their own learning. Students seem to have been conditioned to having their learning predigested for them, and were uneasy with the idea of setting their own course. If it is our intent to create lifelong learners, then it may be that our current method of "delivering" education to students is counterproductive. Given choices, students still tended to look to the instructor for approval, to choose topics they thought the instructor would like, and to resort to traditional methods of learning, rather than accept responsibility and work with the instructor to create innovative ways of learning.

Students who were most comfortable and flourished in this situation seemed to have been prepared for such independence by life experiences outside of school; in order to reach the broader spectrum of students more preparation may be needed. If a similar experiment were replicated, a more gradual approach to

student direction might be attempted, with a number of choices given for students to consider in one course leading to complete independence in a subsequent course.

Students who flourished in the student-designed courses also seemed to differ from those who did not in one other significant way: they were motivated to learn and enjoyed learning by doing (as espoused by Dewey), and were not simply putting in their time to obtain credits in a required course. This too relates to an underlying assumption of constructivism: one must be motivated in order to construct his/her own understandings.

Another consideration might be the homogeneity of expectations for the entire class. Trying to create consensus among over twenty students may have been too optimistic; perhaps individual contracts or small group contracts would have led to even greater ownership of the course among students and less interpersonal conflict.

Conclusion

The educational significance of this pilot study lies in the observation that students did not suffer in achievement from the absence of instructor-imposed structure, and in fact felt more "connected" to the subject matter. Allowing students some control over their own learning is responsive to current cries to make education more "meaningful." Student-designed curricula are also pertinent to the outcomes-based movement--these students successfully demonstrated their achievement of course outcomes in non-traditional ways. Teaching students to take charge of their

curriculum is especially necessary in creating lifelong learners able to adapt to a rapidly changing world.

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Table 1

Number and Gender of Participants by Course

Course*	Males	Females	Total
1	1	5	6
2	1	22	23
3	5	22	27
Total	7	49	56

*1 = History, Philosophy, and Foundations of Education
*2 = Interpreting Educational Research
*3 = Contemporary Issues in Education

Table 2

Paired T-Test Results

Course	Pretest		Posttest		
	Mean	SD	Mean	SD	t
2	112.5	60.48	317.5	57.30	13.10*
3	125.8	53.00	218.7	52.22	7.10*

*$p < .001$.

EDUCATION 610   FALL 1994

PRE-INSTRUCTION SELF RATING   LEARNING STYLE_____CODE_____

Rate your current level of mastery of each of the following eight competencies by placing an X at the appropriate place on the continuum:

1.   Have a general knowledge base of the professional, legal, financial and practical concerns that face the teaching profession today.

I----------------I---------------------I-----------------------I
No Knowledge   A Bit   A Moderate Amount   A Great Deal

2.   An awareness of current trends, innovations, problems and social forces that influence the school curriculum and policies of America.

I----------------I---------------------I-----------------------I
No Knowledge   A Bit   A Moderate Amount   A Great Deal

3.   Skill in identifying, analyzing, discussing and evaluating critical issues and controversies facing professional educators.

I----------------I---------------------I-----------------------I
No Knowledge   A Bit   A Moderate Amount   A Great Deal

4.   Skill in presentation of my thoughts regarding various controversial issues facing educators of today.

I----------------I---------------------I-----------------------I
No Knowledge   A Bit   A Moderate Amount   A Great Deal

5.   Various perspectives from my peers regarding school practices, students, parents and teachers.

I----------------I---------------------I-----------------------I
No Knowledge   A Bit   A Moderate Amount   A Great Deal