Responding to a perceived need resulting from the collapse of the Soviet Union, the dismantling of the Berlin Wall, and the end of the Cold War, the Air Command and Staff College (ACSC) at Maxwell Air Force Base (Alabama) revised its curriculum. Data for the descriptive study were gathered through interviews of the leadership of the school and questionnaires sent to the 75 instructors and 580 students. Responses were received from 44 instructors (59 percent) and 134 students (23 percent). The survey instrument was developed around Grundy's (1987) three fundamental human interests—technical interest, practical interest, and emancipatory interest—to see which of these interests the respondents considered most appropriate to the curriculum. From the interviews, the underlying theory behind the new curriculum was found to be heavily influenced by the practical and emancipatory disposition. From results of the questionnaire, the instructors tend to lean toward a curriculum informed by practical interest. About the same number of students think the curriculum should be informed by the emancipatory disposition as think it is actually technical in the way it is practiced. Most of the students who think the curriculum should be practical in design also think it is practical in practice. A far smaller percentage of students than faculty think the curriculum is actually designed in an emancipatory way. The curriculum of the school was changed as a result of the efforts of Colonel Warden, the Commandant of ACSC, who functioned as a change agent to overcome the dogma that had been established over a long time. As the school's new curriculum nears the end of its second year, there is a gap between theory and practice but it is not a large one. To satisfy faculty and students, the practical interest should be developed more thoroughly, and the faculty should eventually become more emancipatory in their practice. (The school's vision, mission statement, and objectives and the survey document are included in the report.) (KC)
Running head: ACSC CURRICULUM FROM THEORY TO PRACTICE

Toward the Twenty-first Century: Air Command and Staff College
Curriculum from Theory to Practice

Stephen L. Butler
Auburn University
Toward the Twenty-first Century: Air Command and Staff College
Curriculum from Theory to Practice

The Air Command and Staff College (ACSC) at Maxwell AFB has the following mission: "Educate midcareer officers to develop, advance, and apply air and space power in peace and war." For nearly forty years, that meant educating officers in the ways of the Cold War. Air and space power were seen as the key vehicles for defeating the Soviet Union in a massive strategic nuclear war. Even though two limited wars, Korea and Vietnam, should have indicated a change in focus, the curriculum remained virtually unchanged. In fact, it was nearly 15 years after the end of the Vietnam War before the school even taught a lesson about that war.

In 1989 and 1990 the Berlin Wall came down and the Soviet Union disintegrated, changing the world in a major way. Still the curriculum at ACSC remained the same. The inherent resistance to change that exists in most schools was alive and well. Add that to the tradition laden ways of the military and any change faced a major obstacle. A change agent was desperately needed. That's where Colonel John Warden comes in. He arrived at ACSC in the summer of 1992 with a plan to bring the school out of the past and prepare today's students to win tomorrow's wars.

Understanding the difficulties of being seen as an 'outsider' Col Warden didn't make any changes right away. In fact, the first half of academic year (AY) 93 was not changed at all and the curriculum continued to focus on the Cold War as it had seemingly forever. Working behind the scenes however, Col Warden began to recruit the best instructors and share his vision with them. Shortly before the Christmas break it was announced that there would be an experimental course taught in the new year called 'The Air Campaign Course.' Interested students were asked
to volunteer for this pilot program that became the forerunner of the new curriculum that was implemented for the class of 1994 beginning in August, 1993. As an ACSC student in the class of 93 and an instructor of War Theory, War Termination, and Theater Air Campaign Studies since July of 1993, I am examining the curriculum at this school from the perspective of an observer and an active participant both as a curriculum developer and teacher practitioner.

This paper will examine the new curriculum and how it came about after so many years of the status quo, with emphasis on how the barriers to change were overcome. Next, it will discuss the underlying theory behind this new curriculum and how it is perceived by the teachers who enact it on a daily basis. Finally, an examination of how the curriculum is perceived by our most important customer, the students is conducted.

Methodology

Data collection consisted of interviews with the senior leadership of the school and a survey of the teaching faculty and students. Col Warden, the Commandant, and Lt Col Weaver, the Dean of Education were interviewed. These two leaders were the heart and soul of the change and continue to provide guidance to the faculty. Their theories of curriculum and their perception of how it is being practiced in the classroom are compared to those of the practitioners of the curriculum, the classroom instructors and the recipients of the curriculum, the students. A questionnaire was sent to the 75 instructors who are actively involved in teaching the curriculum. A total of 44 (59%) responded. The same questionnaire was sent to each of the 580 students, of which 134 (23%) replied.

The survey instrument was developed around Grundy’s (1987) three fundamental human interests, the technical interest, practical interest, and emancipatory interest (for a complete
description see Grundy, 1987, p. 10 - 20). The survey consisted of seven questions designed to determine which of the three fundamental interests the respondent considered the most appropriate. The first five questions examined their beliefs about education in general. The final two focus on the ACSC curriculum and their beliefs about how it should be designed compared to their perception of how it is actually designed. (A copy of the questionnaire can be found at Appendix B.) The survey was piloted by discussing it in detail with three instructors of varied experience (one is a Ph.D. with several years of teaching experience, one is a first year instructor, and one is a third year instructor) to ensure that the information the questions were designed to collect was understood as written.

The View From the Top

Just how does one go about changing a curriculum that has been in place for so many years? This was the first question posed to both Col Warden and Lt Col Weaver. Col Warden feels the key to overcoming the barriers to change is in the presentation of the new concept. He said, “you must provide a concept of the vision with emphasis on the reasons why this particular change is needed.” He added that “you should always accentuate the positive” because if you attack the existing conditions in a negative tone you are perceived as attacking the people. This is something that must be avoided as you will need these people on your side to initiate the change. Finally, he said you must be very patient and spend lots of time explaining your vision as many times and to as many people as necessary. (J. A. Warden, personal communication, May 25, 1995)

Lt Col Weaver, who was the one charged with turning this vision into a teachable curriculum also had some interesting insights into how barriers to change can be overcome. In his
view there are two things that must work together to make it happen. First, you must have support at the top emphasizing that change is necessary. At the same time, the change cannot be directed from the top but needs to begin at a lower level to have a lasting impact. The second key ingredient is “someone willing to manipulate, cajole, and do whatever it takes to make it happen.” He also pointed out that we’re in a unique position at ACSC in that we have what he called “security of revenue” that enabled us to take chances. This is certainly a luxury that most public schools won’t have as they attempt to deal with change.

Another key to implementing this change was a variation of the traditional focus in education. Many in the field of education feel the focus must always be on the student. In this case however, he felt we couldn’t focus purely on the students. Lt Col Weaver believes, “the heart of the revolution was the instructor force.” The secret to success was getting the instructors to understand the concept of critical thinking. He also realized that some would fail, especially those who insisted on a clear distinction between teacher and student. (L. A. Weaver, personal communication, May 25, 1995)

The other important question, for the purposes of this study, asked of each of these leaders is their curriculum theory and how they believe people learn. Col Warden is a believer in technology as the key to effective instruction. He feels that we should “let machines do the dirty work.” He also believes that without technology you need 22 excellent instructors to reach all the students as opposed to only a handful to reach everyone when you figure technology into the equation. He believes very strongly in empowerment and feels that technology helps to empower the teachers by freeing them from the mundane tasks involved in teaching. (J. A. Warden, personal communication, May 25, 1995)
When Col Warden was given the same questionnaire given to the faculty and students, he answered two of the five questions with the ‘technical’ response. His frequent use of words like empowerment and enlightenment indicate someone who thinks more in emancipatory terms. He did say our curriculum should be designed with the emancipatory interest in the future but felt our curriculum is informed by the practical interest as presented today. (J. A. Warden, personal communication, May 25, 1995)

Lt Col Weaver, on the other hand, not only speaks in emancipatory terms but answered the first five questions on the questionnaire with the emancipatory response. He agrees with Col Warden however, that we currently develop our curriculum with primarily a practical interest. He also emphasized the belief that all students learn differently and each is motivated by different things. He went on to stress the importance of the instructors understanding what motivates the students as a key to success at our school. The focus of our new curriculum are the students who are motivated by us “sparking their intellectual curiosity.” (L. A. Weaver, personal communication, May 25, 1995)

The final thing mentioned to both leaders was a concern that their theories and ideas were not written down anywhere. Col Warden agreed with me that it wasn’t, but Lt Col Weaver’s feeling is that the underlying theory is there for all to see in Col Warden’s vision briefing. Col Warden’s vision for our school is: “To become a world-class educational institution.” (The entire vision statement can be seen at Appendix A) To conclude, based on these interviews, the underlying theory behind our new curriculum is heavily influenced by the practical and emancipatory disposition and the leadership is confident that our practice is heading in that
direction as well, though we are not there yet. (J. A. Warden and L. A. Weaver, personal communication, May 25, 1995)

What do the Practitioners Think?

The data was interpreted in two different ways. First, a speculative analysis was of the responses to each question was conducted to get a general feel for the perception of the instructors. Secondly, a system was developed to classify each instructor, using the data, as to their predominant theoretical belief and whether or not this agreed with their answer to question 6, which asked how the ACSC curriculum should be designed. The responses were also divided between the three teaching divisions (DEA, DEB, and DEC) to see if there were any major differences between them. The abbreviations DEA, DEB, and DEC don’t really stand for anything. Each is a division of DE (Dean of Education) with A, B, and C simply used to differentiate between the three.

Question 1

1. The primary purpose of education is to prepare the learner:

   a. To control and manage the environment.

   b. To understand the environment so he/she can learn to interact with it.

   c. To be liberated from the environment.

   

<table>
<thead>
<tr>
<th></th>
<th>DEA</th>
<th>DEB</th>
<th>DEC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (technical)</td>
<td>1 (8.3%)</td>
<td>2 (11.8)</td>
<td>2 (13.3)</td>
<td>5 (11.4)</td>
</tr>
<tr>
<td>B (practical)</td>
<td>11 (91.7)</td>
<td>12 (70.6)</td>
<td>10 (66.7)</td>
<td>33 (75.0)</td>
</tr>
<tr>
<td>C (emancipatory)</td>
<td>0</td>
<td>3 (17.6)</td>
<td>3 (20.0)</td>
<td>6 (13.6)</td>
</tr>
</tbody>
</table>
The majority (75%) of faculty members chose the practical response to this question regarding the main purpose of education. The others were pretty evenly divided between the technical (11.4%) and emancipatory (13.6%) way of thinking. Interestingly, nobody in DEA chose the emancipatory response.

Question 2
2. The desired knowledge generated by the teacher-student relationship is:

a. Observing the situation as a whole and making meaning from it.

b. Critical thinking.

c. Observation through experimentation.

A (practical)  9 (75.0)  12 (70.6)  13 (86.7)  34 (77.3)
B (emancipatory)  3 (25.0)  4 (23.5)  2 (13.3)  9 (20.5)
C (technical)  0  1 (5.9)  0  1 (2.2)

Even a higher percentage (77.3) selected the practical response to this question. Also of interest is the fact that only one instructor thought that technical knowledge was the desired outcome of the learning experience. The three groups were fairly consistent in their responses to this question.

Question 3
3. The most important learning outcome for the student is:

a. Enlightenment

b. Skills

c. Judgment

A (emancipatory)  5 (41.7)  8 (47.1)  9 (60.0)  22 (50.0)
The faculty leaned more to the emancipatory response on this question. Col Warden’s influence appears to be evident here as he uses the word ‘enlightenment’ quite often. It is surprising that as many as seven instructors think skills are most important at this level.

**Question 4**

4. The real value of a theory of curriculum is that it:
   a. Reorients power.
   b. Provides direction.
   c. Provides guidance.

<table>
<thead>
<tr>
<th></th>
<th>A (emancipatory)</th>
<th>B (technical)</th>
<th>C (practical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>6 (50.0)</td>
<td>6 (50.0)</td>
</tr>
<tr>
<td>B</td>
<td>4 (23.5)</td>
<td>7 (41.2)</td>
<td>6 (35.3)</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>5 (33.3)</td>
<td>10 (66.7)</td>
</tr>
</tbody>
</table>

This question produced some surprising results, especially in light of the answers to the previous question. Perhaps the connection between empowerment and reorienting power was not made. This could also indicate a reliance to revert to the known way of doing business when things don’t work exactly as planned. This question had by far the most technical responses.

**Question 5**

5. Research in the field of education should be:
   a. Qualitative research.
   b. Action research.
   c. Quantitative research.
There may have been a problem with this question as several respondents commented that they did not know what action research was. It is interesting that only 11% feel research in education should be quantitative. The responses to this question were in line with the first two. Again, the three groups were consistent.

Questions 6 and 7

6. In your opinion, what is the ideal way to design the curriculum?
   
   a. It should be designed to control the process of learning by controlling the process of teaching. The teacher should teach as prescribed by the curriculum developer.
   
   b. It should be designed so the teacher and students interact. Both are concerned with promoting the right action. The key element is teacher judgment rather than teacher direction.
   
   c. It should be designed to empower both teacher and student. Their joint discoveries should then drive future actions.

   A (technical)  1 (8.3)  0  0  1 (2.2)
   B (practical)  8 (66.7)  6 (35.3)  6 (40.0)  20 (45.5)
   C (emancipatory)  3 (25.0)  11 (64.7)  9 (60.0)  23 (52.3)

7. Which of the above curriculum theories do you think is practiced most often here at ACSC?

   A (technical)  5 (41.7)  7 (41.2)  7 (46.7)  19 (43.2)
   B (practical)  3 (25.0)  5 (29.4)  6 (40.0)  14 (31.8)

11
These two questions were examined together. One interesting aspect is that only one teacher thinks the curriculum should be technical in design but almost half (43.2%) think it actually is. The responses are nearly evenly split on whether our curriculum should be informed by the practical (45.5%) or emancipatory (52.3%) interests. Question 6 was the only question where there was a noticeable difference between the divisions, with two-thirds of DEA instructors thinking the curriculum should be practical in design and at least 60% of the other two thinking it should be emancipatory.

Next, each instructor was classified as follows based on their responses to questions 1 - 5:

- **Technical** if they answered at least 4 questions with the technical response.
- **Practical** if they answered at least 4 questions with the practical response.
- **Emancipatory** if they answered at least 4 questions with the emancipatory response.
- **Mostly technical** if they answered 3 questions with the technical response.
- **Technical practical** if they answered all 5 questions in these two areas with a 3/2 split.
- **Mostly practical** if they answered 3 questions with the practical response.
- **Practical emancipatory** if they answered all 5 questions in these two areas with a 3/2 split.
- **Mostly emancipatory** if they answered 3 questions with the emancipatory response.
- **Unknown** if they didn’t answer more than 2 questions in any of the three areas.

The category each was placed in was compared with their response to question 6 to see if their answers to questions 1-5 agreed with the way they thought the curriculum should be designed. The results follow:
<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Practical</td>
<td>16 (36.4%)</td>
<td>13</td>
</tr>
<tr>
<td>Emancipatory</td>
<td>1 (2.3)</td>
<td>1</td>
</tr>
<tr>
<td>Mostly tech</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Tech/prac</td>
<td>5 (11.4)</td>
<td>2</td>
</tr>
<tr>
<td>Mostly prac</td>
<td>6 (13.6)</td>
<td>3</td>
</tr>
<tr>
<td>Prac/eman</td>
<td>5 (11.4)</td>
<td>4</td>
</tr>
<tr>
<td>Mostly eman</td>
<td>1 (2.3)</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>10 (22.7)</td>
<td></td>
</tr>
</tbody>
</table>

In most cases, the instructors tend to lean toward a curriculum informed by the practical interest. Almost 73% of them fit somewhere into the practical theory. It is also interesting that only one person answered at least 4 questions in the emancipatory way while over one-third answered at least 4 in the practical way. Half of those chose all 5 practical responses. Over 77% of the teachers answered question 6 in the way that agreed with their way of thinking which appears to show consistency.

How About Our Primary Customers?

The same questions were asked of the students and the data was analyzed using the same two methods as with the faculty. The students at this school are very much peers with the instructors. In fact, most of the faculty were students in one of the last three years. For this
reason, their perceptions of what is being taught appears to be a valid measure of how effectively the curriculum is translated from theory to practice.

Question 1

1. The primary purpose of education is to prepare the learner:
   a. To control and manage the environment.
   b. To understand the environment so he/she can learn to interact with it.
   c. To be liberated from the environment.

   A (technical) 12 (9.0%)
   B (practical) 119 (88.8)
   C (emancipatory) 3 (2.2)

   An overwhelming response for the practical theory as it relates to the purpose of education. This was the largest percentage of one response to any of the questions.

   An interesting aside, Lt Col Weaver even though he chose the emancipatory response for this question, used the words “interact with the environment” twice during the interview. Perhaps this message was on passed to the students as well.

Question 2

2. The desired knowledge generated by the teacher-student relationship is:
   a. Observing the situation as a whole and making meaning from it.
   b. Critical thinking.
   c. Observation through experimentation.

   A (practical) 89 (66.4)
   B (emancipatory) 32 (23.9)
Again, most of the students were thinking in practical terms when dealing with desired knowledge. The 24% who chose critical thinking could be those students that Lt Col Weaver was targeting when he spoke of “sparking intellectual curiosity.”

Question 3

3. The most important learning outcome for the student is:
   a. Enlightenment.
   b. Skills.
   c. Judgment.

A (emancipatory) 61 (45.5)
B (technical) 31 (23.1)
C (practical) 42 (31.3)

Like the faculty, this was the one question where the emancipatory response was the most often selected. A far greater percentage of students than faculty thought skills were the most important learning outcome. Again, this answer may reflect the Commandant’s frequent use of the word “enlightenment.”

Question 4

4. The real value of a theory of curriculum is that it:
   a. Reorients power.
   b. Provides direction.
   c. Provides guidance.
Question 5

5. Research in the field of education should be:
   a. Qualitative research.
   b. Action research.
   c. Quantitative research.

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (practical)</td>
<td>92 (68.7)</td>
</tr>
<tr>
<td>B (emancipatory)</td>
<td>32 (23.9)</td>
</tr>
<tr>
<td>C (technical)</td>
<td>9 (6.7)*</td>
</tr>
</tbody>
</table>

*1 student did not answer this question

The responses to this question are similar to those of the faculty. Very few students, less than 7%, feel that research in the field of education should be quantitative.

Question 6 and 7

6. In your opinion, what is the ideal way to design the curriculum?
   a. It should be designed to control the process of learning by controlling the process of
teaching. The teacher should teach as prescribed by the curriculum developer.

b. It should be designed so the teacher and students interact. Both are concerned with promoting the right action. The key element is teacher judgment rather than teacher direction.

c. It should be designed to empower both teacher and student. Their joint discoveries should then drive future actions.

A (technical)  5 (3.7)
B (practical)  47 (35.1)
C (emancipatory)  81 (60.4)*

*1 student did not answer this question.

7. Which of the above curriculum theories do you think is practiced most often here at ACSC?

A (technical)  82 (61.2)
B (practical)  44 (32.8)
C (emancipatory)  8 (6.0)

Interestingly, almost the identical number of students think our curriculum should be informed by the emancipatory disposition as think it is actually technical in the way it is practiced. Most of the students who think the curriculum should be practical in design also think it is practical in practice. A far smaller percentage of students than faculty think we actually design our curriculum in an emancipatory way.

The second analysis of the data was conducted in the same way as that for the faculty with the following results:

Agree  Disagree

Technical  0
ACSC Curriculum 17

<table>
<thead>
<tr>
<th>Practical</th>
<th>40 (29.9%)</th>
<th>19</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emancipatory</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly tech</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tech/prac</td>
<td>19 (14.2)</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Mostly prac</td>
<td>24 (17.9)</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Prac/eman</td>
<td>18 (13.4)</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Mostly eman</td>
<td>3 (2.2)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Two interesting things about this data are the high number of students who were practical compared to none who were technical or emancipatory and the high number of students who answered question 6 differently than their answers to 1 - 5 would indicate. The big exception was those in the practical/emancipatory category who all chose the response to question 6 that agreed with their predominant way of thinking.

Conclusions

The Commandant of ACSC, Col Warden, has a vision for the school and has dedicated the last three years of his Air Force career to making a difference in the direction this school takes in the future. He was the change agent that was needed to overcome the dogma that had been established here over a long period of time.

As the new curriculum nears the end of its second year, there is a gap between theory and practice. This gap however, is not a large one or one that cannot be overcome. The school’s leadership has a pretty clear picture of what is actually occurring in the classroom. The survey of faculty and students shows a strong connection to curriculum that is informed by the practical
interest. One can say, based on this data, that most of the faculty and students believe that the curriculum should be informed by the practical interest. At the same time, over 40% of the faculty and over 60% of the students feel that, as practiced here at ACSC, the curriculum is informed by the technical interest. This is something the institution should work on for next year. The Commandant and his Dean of Education talk in emancipatory terms. The curriculum theory that serves as the basis for what is done at this school is informed by the practical and emancipatory interests. If this change is given a chance to keep growing, I believe the faculty will eventually become more and more emancipatory in their practice. The school gets a new commandant and a new dean of education next year. It will be very interesting to see where ACSC goes from here.
Appendix A

Vision Statement

VISION: To become a world-class educational institution.

MISSION: Educate midcareer officers to develop, advance and apply air and space power in peace and war.

OBJECTIVES:

- Maintain a world-class educational environment
- Prepare leaders to understand the nature of conflict and the role of airpower
- Prepare leaders to understand the joint campaign planning process
- Prepare leaders to plan and execute the air campaign component of the campaign process
- Prepare leaders to develop the organization, training, and equipment necessary to prosecute tomorrow’s air campaign successfully
- Prepare leaders to integrate the air campaign into joint and combined campaigns
- Prepare leaders for higher level command and staff responsibilities
- Prepare leaders to think strategically, operationally, and critically
- Prepare leaders to embrace and develop new technology
- Expand and advance the aerospace body of knowledge
- Promote military professionalism

(Taken from the ACSC Student Guidebook)
Appendix B

Survey

Questions 1-5 relate to your views about education in general.

1. The primary purpose of education is to prepare the learner:
   a. To control and manage the environment.
   b. To understand the environment so he/she can learn to interact with it.
   c. To be liberated from the environment.

2. The desired knowledge generated by the teacher-student relationship is:
   a. Observing the situation as a whole and making meaning from it.
   b. Critical theory.
   c. Observation through experimentation.

3. The most important learning outcome for the student is:
   a. Enlightenment.
   b. Skills.
   c. Judgment.

4. The real value of a theory of curriculum is that it:
   a. Reorients power.
   b. Provides direction.
   c. Provides guidance.

5. Research in the field of education should be:
   a. Qualitative research.
   b. Action research.
   c. Quantitative research.

Please answer questions 6 and 7 as they apply to you and the ACSC curriculum.

6. In your opinion, what is the ideal way to design the curriculum?
   a. It should be designed to control the process of learning by controlling the process of teaching. The teacher should teach as prescribed by the curriculum developer.
   b. It should be designed so the teacher and students interact. Both are concerned with promoting the right action. The key element is teacher judgment rather than teacher direction.
   c. It should be designed to empower both teacher and student. Their joint discoveries should then drive future actions.

7. Which of the above curriculum theories do you think is practiced most often here at ACSC?