The University of Wisconsin System and the Wisconsin Department of Public Instruction have been involved in a multi-year program since 1998. One goal of the program has been to align curricula within the K-16 system of education in Wisconsin. The purpose of the Curriculum Articulation Project has been to work with educators in the state of Wisconsin to move toward a well articulated educational system that provides students a seamless transition between secondary and post-secondary institutions. The working groups found that it is not the curriculum, but that student expectations, the teacher expectations, and the professor expectations appear to be misaligned. While curricular alignment addresses performance and achievement in terms of content, it was found that study skills, family and friend support, advisement and personal responsibility also play a crucial role in the success of the student. Additionally, for any effort designed to improve student success, not only the curricula and students must be examined, but also the role of the administrators and teaching faculty involved in the process must be addressed. A follow-up study based on criteria previously identified as misaligned was conducted and the results reported. Recommendations for more successful evaluation of curriculum articulation are offered. A data sheet is attached. (Contains 15 references.) (Author/BE)
Curriculum articulation and transitioning student success:
Where are we going wrong and what lessons have we learned?

Randy Gabrys Alexson
Associate Professor of Geography
rgabrys@facstaff.uwsuper.edu
715.394.8428
715-394-8418 (FAX)

Christopher P. Kemnitz
Associate Professor of Biology
ckemnitz@facstaff.uwsuper.edu
715.394.8239
715.394.8418 (FAX)

University of Wisconsin-Superior
Department of Biology and Earth Sciences
Catlin & Belknap Avenues
Superior, WI 54880
Abstract

The University of Wisconsin System and the Wisconsin Department of Public Instruction have been involved in a multi-year program starting in 1998, one goal of the program has been aligning curricula within the K-16 system of education in Wisconsin. The purpose of the Curriculum Articulation Project has been to work with educators in the state of Wisconsin to move toward a well-articulated educational system that provides students a seamless transition between secondary and post-secondary institutions.

The working groups found that it is not the curriculum, but that students' expectations, the expectations of their teachers, and the expectations of their professors appear to be misaligned. While curricular alignment addresses performance and achievement in terms of content, it was found that study skills, family and friend support, advisement and personal responsibility also play a crucial role in the success of the student. Additionally, for any effort designed to improve student success, we must look at not only the curricula and students, we must also address the role of the administrators and teaching faculty involved in the process.

A follow-up study based on criteria previously identified as misaligned was conducted and the results reported. Recommendations for more successful evaluation of curriculum articulation are offered by the authors.
Introduction

The University of Wisconsin System and the Wisconsin Department of Public Instruction have been involved in a multi-year program starting in 1998, one goal of the program has been aligning curricula within the K-16 system of education in Wisconsin (Curriculum Articulation Project, 2001). The goal of the Curriculum Articulation Project has been to work with educators in the state of Wisconsin to move toward a well-articulated educational system that provides students a seamless transition between secondary and post-secondary institutions. The primary focus of the project has been to facilitate a comparison of K-12 curricula, recently revised to reflect the standards set forth by the state of Wisconsin (Wisconsin Model Academic Standards, 2001), with the content of entry-level courses in the University of Wisconsin System. The focus of this project and similar projects in other states such as Colorado (Colorado State Standards, 2001) is on curricular content. Related initiatives have been conducted in the 49 other states, aimed at raising standards, redesigning curricula, and improving student success and achievement (Reality Check 2000, 2002). Some very notable curriculum articulation research and implementation programs include those in the states of Massachusetts (Crawford, 2000), Texas (Naylor, 1987), California (National Commission on Excellence in Education, 1983), and Nebraska (Greenberg, 1992), to name a few.

The science curriculum working group of the Wisconsin Curriculum Articulation Project found curricular content to be well-aligned in the areas of biology, chemistry, and earth sciences. Therefore, as the group progressed through the process of analyzing curricular content it became apparent that while curricular alignment is important, other factors are just as important in smooth transitioning. The group identified several areas that would impact successful student transitioning. In our initial project the group found that it is not the curriculum, but that student s
expectations, the expectations of their teachers, and the expectations of their professors appear to be misaligned. While curricular alignment addresses performance and achievement in terms of content, it was found that study skills, family and friend support, advisement and personal responsibility also play a crucial role in the success of the student. Additionally, for any effort designed to improve student success, we must look at not only the curricula and students, we must also address the role of the administrators and teaching faculty involved in the process. And, indeed, according to previous studies:

"Formal articulation agreements legitimize secondary-to post-secondary opportunities for students. Through formal articulation agreements, transition becomes a reality for students. Educational administrators and faculty can gain confidence that the transition process is feasible. Students and their parents can realize that college-level studies are attainable. In terms of tangible benefits, formal agreements give students a leg up on college by reducing repetition of course content that they have already mastered. Theoretically, formal agreements can also become the vehicle that draws more high schools students to community colleges, because the agreements put into writing a well-planned and endorsed course of study showing a pathway to college. (Harriman, 1992)"

In an effort to follow-up on the initial findings, two members of the working group visited area high schools to discuss the initial findings with college-bound students and their teachers. Twelve schools were contacted in writing. Of these twelve schools, only two responded positively. The willingness of schools to meet with the working group was impacted by several identifiable factors including time constraints, scheduling, and teacher-perceived level of student interest. However, it was also apparent in conversations with high school faculty and administrators that a certain degree of mistrust exists between K-12 and post-secondary faculty. Many secondary faculty report an attitude of elitism on the part of the college-level faculty and
this perception can be a major hindrance to cooperative efforts (Colorado Post-secondary Education Commission, 2001). Since efforts were made to be as non-intrusive as possible in designing the requests for visits it became even more important for the working group to critically evaluate why so few schools responded.

The teachers with whom the team coordinated were in each case newer faculty, and were likely unfamiliar with past efforts in curricular alignment and related projects. Interestingly, the discussions that took place with students and faculty revealed that the disconnect in transitioning was not that the students were unprepared, or that they were not interested in learning about how to be successful, it was that their access to information regarding the K-12 to college transition was lacking. An area of student concern was that they were not being taken seriously. Student interest in the visits was overwhelming, and the participating high school faculty also expressed their appreciation that a link between K-12 and the university was initiated by this study. However, discussions with some non-participating faculty revealed that an atmosphere of mistrust and skepticism exists that may be a significant impediment to establishing transitional links. Studies have shown that while many articulation efforts have been established, truly successful ones, in the long term, may be rare (Nebraska Coordinating Commission for Post-secondary Education, 1993).

**Methods**

A letter was sent to the science faculty contact person at the 12 schools that been in the district designated for the initial phase of the curriculum articulation project. The letter explained the results of the initial effort, that curriculum was well-aligned but there appeared to be other student-perceived disconnects that two of the assigned team members would like to follow up on.
The letter asked if there would be a time in the upcoming semester when the two team members could visit a class and discuss the student-perceived disconnects. Teachers were asked to return the form whether or not they chose to participate. If they wanted to participate, they were asked to list the most convenient times and were assured that there was no preparation needed for the visit. If the teachers chose not to participate, they were asked to list reasons why a visit was not possible. The teachers were asked to return the form in a self-addressed stamped envelope provided by the follow-up team within one month of receipt. A copy of this introduction letter was also sent to the principal at each school.

Only two of the twelve forms were returned by the deadline so a follow-up letter, form, and self-addressed envelope were sent to the ten teachers who did not respond. The letter acknowledged that with the hectic schedules all high school teachers have, it was understandable that the original letter was either overlooked or misplaced, and asked if they would please complete this one and return it, whether a visit was possible or not. A copy of this letter was also sent to the principals.

Following this query, two more forms were returned, both reporting that a visit was not possible, so the study progressed with only two participating schools. Visits were arranged via e-mail, again in an attempt to be as non-intrusive as possible, rather than calling the teacher at school and disturbing their schedule. It was left to the teachers to determine what class or classes the team would visit. After the time frame was determined, the teachers were told of the tentative agenda; a 15-20 minute discussion of the previously identified student perceived disconnects where the students were encouraged to interact, ask questions and provide comments. The presentation by the two-member team included a discussion about college syllabi, exam styles, differences in teaching methods, faculty student interactions, advisement, and student
empowerment and responsibilities. This was followed by a brief survey by both teacher and
students where they commented on efficacy of the visit. Finally, approximately 15-20 minutes of
very informal discussion while the students moved around and looked at textbooks, syllabi, and
sample exams. These additional materials were included to give students the opportunity to
interact more easily, both with their peers and the presenters. The presentations purposely were
kept as informal as possible, and provided many opportunities for the students to ask questions.

The first visit was with one class of approximately 30 students, as determined by the
participating teacher. The second visit was with a combined group of 3 classes, that the
participating teacher assembled, with a total of 66 students present.

Results

It is impossible to generalize from the findings of only two schools and approximately
100 students. However, enough similarities and patterns were illuminated in the data collected to
argue for the viability of this attempt. A need exists for further efforts addressing articulation that
goes beyond the curriculum and strives to meet the self-reported needs of the students.

Table 1 summarizes some of the quantitative data collected including that, most
importantly, the vast majority of students at both schools found the visit to be useful. Student
apathy, as was reported by some secondary faculty, was not found to be an accurate assumption.
In fact, one student who had a doctors appointment and would not be in class, was waiting to ask
questions and get the follow-up team’s e-mail addresses so she could correspond - she was
extremely disappointed to miss out on the opportunity to meet with college faculty.

The two-person team found that in addressing a mixed audience of students, having two
faculty members present worked very well as it engaged the students more effectively and
offered them different perspectives. However, based on verbal and written responses, the students would find it most useful to have a current college student also visit the class to provide information from the student perspective. Social transitioning issues were also of importance to the students, and while faculty can offer scenarios about dorm life and other socialization processes, the addition of a college student on the visiting team was highly recommended by students at both schools. The textbooks, syllabi, and sample exams that were provided for student review were received very positively and students reported this both verbally and on the written survey. Students reported that being able to actually see these materials demystified college to a great extent. They also reported that it was a relief not to have to be locked into a major upon entering college and the fact that they would have a personal advisor in college was news to most students.

When the students were asked what sources they currently use to find out about college, while the results varied between schools concerning some sources of information, almost one-half of the students reported that they rely on their teachers for information. In addition to the list of possible source for information, the students were asked to list any other sources they used and many from both schools listed college fairs as very important sources of information.

Students were asked the open ended question, What concerns or questions do you have about college? and, again, students from both schools reported curriculum articulation related issues as those most important to them, such as:

How hard is it really?

Is it really as hard as people make it seem?

What are the class sizes and how much personal attention will I get from a professor?
I'm afraid that my teachers will be too tough.

Overall difficulty with the transition are my main concerns.

Student interaction with the team during the presentation portion was limited. Perhaps this was due to the student's unease in front of their peers or fear of appearing uniformed in front of their teachers and college faculty. The most productive time seemed to be after the presentation when students had a few minutes between their classes to approach the team independently. The students expressed gratitude that the team cared enough to meet with them and their concerns and questions were similar to the written comments received.

**Recommendations**

This experience left the team with definite impressions regarding how to successfully empower students and improve their success in transitioning to college.

1) Faculty visits to high schools are important to make students feel validated. 2) High school students want to hear not only from college faculty but from their peers, i.e. students from the college who have made this transition. 3) A team approach at presenting is highly effective in engaging the students. 4) Visual aids, texts, sample exams are very useful and of interest to students. 5) Students seemed to appreciate that the team was reinforcing what their teachers were already telling them about college. Finally, 6) On-going visits like this could promote recruitment and interest of students because of the personal touch involved. From Table 1, fewer than half of the students in this study reported that they plan to go to a college or university in-state.

One of the most disturbing discoveries of the follow-up visits was the lack of response from 10 of the 12 schools with whom we requested visits. Time constraints and scheduling
conflicts were cited as reasons for not wanting visits, but several respondents from CESA 12 high schools indicated they thought their students would not be interested in learning about college. It also became apparent during discussion with high school faculty in our working group, and during our two successful visits that an atmosphere of mistrust and skepticism exists among some faculty that may be an impediment to efforts such as the Curriculum Articulation Project. In particular, one senior faculty member at a high school we visited regarded us with great skepticism. Indicating that he thought efforts such as this were not valid since past such efforts had not been followed through on and that administration did not truly care what faculty thought. It is believed that this one individual represents a larger group of teaching faculty, who in expressing their frustration, may be hindering the success of transitioning students. There is also the well-documented, historically embedded, problematic relationship between secondary and post-secondary faculty, where the secondary faculty resent the condescending nature in which they are treated by some post-secondary faculty - a problem which must be addressed in any articulation effort in order for it to be successful.

Also, secondary teachers are certainly over-worked, underpaid, and must continually work with limited resources. The unfortunate outcome of such conditions is obviously burn-out and an attitude of disinterest in some. To say that students do not care to learn about successful transitioning into their college career underestimates the students and the educational system. While it may be unpleasant to discuss, this attitude does exist. The educational system has an eclectic mix of administrators, teachers and students, it is therefore not unexpected that in all groups there will be highly varied attitudes about each other. In order for efforts such as the Curriculum Articulation Project to succeed, it is necessary to move away from a descriptive assessment of problems and issues dealt with by only a few individuals to a more holistic
interactive approach of student success and achievement.

Two primary thrusts are recommended for attaining the goals of the Curriculum Articulation Project. The first is to maintain an ongoing dialogue between the K-12 and post-secondary community, fostering trust and acceptance. This can be accomplished by sharing the results and positive outcomes of this very limited pilot project, both with the schools visited and with those schools who did not participate. Through persistence and example we may be able to overcome some of the boundaries to success that have been identified. The second is to use a utilization-focused evaluation approach in future efforts in this area. Determining success through evaluation and assessment, and the development of aligned standards will only succeed if a mechanism is developed to continually evaluate and assess the effectiveness of our educational system. To this end, we must develop a mechanism of on-going evaluation and assessment that is continuous, that will not sit on a shelf and gather dust. This is in effect a large reason that seasoned high school and post-secondary teachers may have become so embittered to the process of curricular redesign and assessment.

However, as previously mentioned, all states have addressed the issue of articulation and some, most notably the state of Delaware, seem to be making strides in this effort. While Delaware is a small state with one community college system, three private four-year colleges, and two state-supported universities, they have developed the Delaware Technical Preparation Consortium, a consortium of secondary, two and four-year colleges and universities, and businesses to foster the connection between secondary and collegiate programs and work. This articulation has expanded to all Delaware high schools, the community college, and most of the four-year institutions in Delaware as well. (Bragg, 1999; Articulation With Public Schools and Private Career Schools, 2001; Delaware Department of Education, 2002).
The most appropriate way for curriculum articulation to take place in a larger state, is by following Patton's model of Utilization-Focused Evaluation (Patton, 1997) which is both a philosophy of evaluation and a practical framework for designing and conducting evaluations. Many traditional methods of evaluation are largely ineffective because well-intentioned evaluators rush into technical details and methods decisions without establishing a solid foundation for the evaluation in clear purposes and shared understandings. This evaluation framework directly involves all users; in this case the high school students and teachers, college professors, Wisconsin Department of Public Instruction, and the University of Wisconsin System during each phase of the process. It is this philosophy, that all who will be impacted are involved, that makes utilization-focused evaluation the most logical framework for the assessment of curriculum articulation. Encouraging inclusion in curricular design and content will promote trust and acceptance within the faculty community which will go a long way towards improving faculty-student interactions and access to information related to the high school-college transition.

Acknowledgements

Special thanks to Ms. Laurie Lawver from Park Falls High School and Mr. David Autrey from Washburn High School for allowing the authors the opportunity to visit their schools. The authors also want to thank Ms. JoAnne Jensen, Foundation Fellowship research assistant, for her valuable contribution during the preparation and editing of this manuscript.

References

Articulation with public schools and private career schools. (n.d.).
Retrieved February 1, 2001 from http://mhec.stac.usmd.edu/plnIII.html


Naylor, Michelle. (1987). Articulation between secondary or postsecondary vocational education programs and propriety schools. ERIC Clearinghouse on adult career and vocational education. ERIC Digest #64. Columbus, Ohio.


<table>
<thead>
<tr>
<th>Sources of information used to learn about college</th>
<th>School 1</th>
<th>School 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>43%</td>
<td>50%</td>
</tr>
<tr>
<td>Guidance Counselors</td>
<td>18%</td>
<td>62%</td>
</tr>
<tr>
<td>Friends</td>
<td>36%</td>
<td>72%</td>
</tr>
<tr>
<td>Parents</td>
<td>40%</td>
<td>56%</td>
</tr>
<tr>
<td>Internet</td>
<td>40%</td>
<td>71%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent of students planning to attend college</th>
<th>School 1</th>
<th>School 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of students planning to attend in-state colleges</td>
<td>53%</td>
<td>87%</td>
</tr>
<tr>
<td>Percent of students planning to attend in-state colleges</td>
<td>20%</td>
<td>42%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent students who found our visit helpful</th>
<th>School 1</th>
<th>School 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent students who found our visit helpful</td>
<td>63%</td>
<td>80%</td>
</tr>
</tbody>
</table>
I. DOCUMENT IDENTIFICATION:

<table>
<thead>
<tr>
<th>Title:</th>
<th>Curriculum Articulation in Wisconsin: What have We Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s):</td>
<td>Randy Alexson</td>
</tr>
<tr>
<td>Corporate Source:</td>
<td>Publication Date: 2003</td>
</tr>
</tbody>
</table>

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

The sample sticker shown below will be affixed to all Level 1 documents.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

[Signature]

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

[Signature]

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

[Signature]

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: [Signature]

Organization/Address: University of Wisconsin

Printed Name/Position/Title: Randy Alexson Associate Professor

Telephone: 608-262-8428 FAX: 608-262-6182

E-Mail Address: rga@wisc.edu Date: 4/4/03

Sign here, please.
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC/CHESS
2805 E. Tenth Street, #120
Bloomington, IN 47408

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfacility.org

8 (Rev. 2/2001)