

**A FEASIBILITY STUDY  
OF THE  
ARTS AND SCIENCES/TEACHER EDUCATION  
COLLABORATIVE (ASTECC)**

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***INTRODUCTION:  
THE PURPOSES OF ARTS AND SCIENCES – TEACHER EDUCATION  
COLLABORATION***

Good teachers have a commitment to students and their learning. They believe that their teaching matters in the lives of students, and that how well students learn the subjects will influence the quality of their own lives. Good teachers have a love of learning that is evident in the way they conduct their lives and reflected in the way they approach the subjects they are teaching to their students. Those statements are wildly idealistic, but they are part of the bedrock in reformers' minds and explain the great frustration that accompanies anyone who gets too close to either teacher education or K-12 schools. As is evident to many involved in teacher education or K-12 reform, many of the teachers currently in the classrooms are not deeply engaged in the content of the subjects they teach.

Critics claim that colleges of education focus their attention exclusively on pedagogical methods and teacher dispositions at the expense of ensuring that new teachers have solid subject-matter knowledge. As a way to encourage more people into teaching careers and undermine teacher education programs, these critics offer those with B.A. degrees in the liberal arts alternate routes into teaching that bypass the requirements of teacher preparation. The social and political context within which teacher education programs prepare new teachers today is one of high accountability and deep suspicion of the status quo. The federal Title II law requires institutions of higher education to report on the content preparation of candidates based on their pass rate on Praxis II licensure exams; and both the National Council for Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC), the two national accreditors of teacher education, demand evidence that a program is producing the knowledgeable and skilled teachers it claims to be graduating. The threat of sanctions against programs that do not meet these standards is present, even if no program has yet suffered much for not meeting them. Teacher education programs have become the "red light" issue in higher education for many state and federal legislators, business and education leaders, and foundation executives. In response to these challenges, colleges and universities could see that it is in their best interest to expand the influence and participation of arts and sciences faculty in the education of their teacher candidates.

That teachers must know the subjects they are teaching is one of the most compelling arguments for insisting that arts and sciences and teacher education faculty collaborate on the design and delivery of teacher preparation. A teacher's effectiveness in the classroom trumps everything else as the greatest influence on student academic growth. The influence of effective teachers is both additive and cumulative, and those children who have poor teachers for three years in a row are unlikely ever to recover academically from the experience. These findings, reported first in 1993 from William Sanders' research on the Tennessee Value-Added Assessment System<sup>1</sup>, challenge the assumptions of educators, researchers, and policymakers that

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<sup>1</sup> W.L. Sanders and S.P. Horn (1993). "An Overview of the Tennessee Value-Added Assessment System with Answers to Frequently Asked Questions." Knoxville: University of Tennessee Value-Added Research and Assessment Center; W.L. Sanders and J.C. Rivers (1996). "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement." Research Program Report. Knoxville: University of Tennessee Value-Added

social factors (family life, economic status, race) or education policies (ability grouping, small class size) are the critical predictors of how well students learn in school. Not only does Sanders' research demonstrate that teachers matter most in terms of student learning, but it also demonstrates that there is wide variation in the levels of effectiveness among practicing (and probably licensed) teachers.

Although little credible research defines the characteristics of effective teachers in terms of student learning outcomes,<sup>2</sup> the field has generally accepted teachers' verbal skills, subject matter knowledge, and teaching skills as essential criteria for good teaching. The federal No Child Left Behind (NCLB) legislation of 2002<sup>3</sup> requires that every class be taught by a "highly qualified teacher," which states define as teachers licensed to teach the subject(s) they are assigned. Most states hold both schools and teachers accountable for how well each student meets academic content standards as measured by state assessments, and NCLB requires that each school demonstrate adequate yearly progress (AYP) toward that goal.

The congruence of research, federal and state laws, and K-12 content standards focuses attention on the content preparation of teachers. State and national accreditors expect institutions of higher education to produce evidence that both general education courses and academic majors are sufficient to prepare new teachers for today's classrooms. For example, programs use gateway assessments to collect data on all candidates at critical points, such as program entry and exit. Faculty in the college of education use the analysis of this data from gateway assessments to make changes in the teacher preparation curricula. Because of concern about how well teachers know their subjects, most of the reports promoting teacher education reform published in the past 15 years<sup>4</sup> have recommended collaboration between the colleges of arts and sciences

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Research and Assessment Center; W.L. Sanders and S.P. Horn (1998). "Research Findings from the Tennessee Value-Added Assessment System: Database Implications for Educational Evaluation and Research." Knoxville: University of Tennessee Value-Added Research and Assessment Center.

<sup>2</sup> Summaries of the research appear in D.C. Humphrey, *et. al.* (2000). *Preparing and Supporting New Teachers: A Literature Review*. Menlo Park, CA: SRI International; S.M. Wilson, R.E. Floden, and J. Ferrini-Mundy (2001). *Teacher Preparation Research: Current Knowledge, Gaps, and Recommendations*. Seattle: University of Washington Center for the Study of Teaching and Policy; K. Walsh (2001). *Teacher Certification Reconsidered: Stumbling for Quality*. Baltimore: The Abell Foundation; S.M. Wilson and R.E. Floden (2003). *Creating Effective Teachers: Concise Answers for Hard Questions: An Addendum to the Report Teacher Preparation Research: Current Knowledge, Gaps, and Recommendations*. Washington, DC: AACTE; M. Cochran-Smith and K.M. Zeichner, eds. (2005). *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*. Mahwah, NJ: Lawrence Erlbaum.

<sup>3</sup> No Child Left Behind Act, Public Law 107-110 (2002).

<sup>4</sup> For example: *A Nation Prepared: Teachers for the 21<sup>st</sup> Century* (Carnegie Forum on Education and the Economy, 1986); *The Reform of Teacher Education for the 21<sup>st</sup> Century*. Year One Report. (Project 30/University of Delaware, 1989); *Project 30 Year Two Report: Institutional Accomplishments* (University of Delaware, 1991); *What Matters Most: Teachers for Our Nation's Schools* (National Commission on Teaching and America's Future, 1996); *To Touch the Future: Transforming the Way Teachers Are Taught – An Action Agenda for College and University Presidents* (ACE, 1999); *A Call for Teacher Education Reform: A Report of the AASCU Task Force on Teacher Education* (AASCU, 1999); *Resolution on Teacher Education* (AAU, 1999); *Getting Beyond Talk: State Leadership Needed to Improve Teacher Quality* (SREB, 1999); *The Full Circle: Building a Coherent Teacher Preparation System* (NASBE, 2000); *In Pursuit of Quality Teaching: Five Key Strategies for Policymakers* (ECS, 2000); *Educating Teachers of Science, Mathematics and Technology* (NRC, 2001); *Investing in Teaching* (NAB, 2001); *Developing Knowledgeable Teachers: A Framework for Standards-based Teacher Education Supported by Institutional Collaboration*. The STEP Reports, 1, ii (AACTE, 2003).

and education. This collaboration could be an important strategy to ensure that the gateway assessments measure the content preparation of teachers and offer evidence to strengthen the requirements and courses offered in the disciplines to teacher candidates. Although few reports specify the nature of collaborative work, a number of higher education initiatives have been launched that promote cross-campus collaboration as a strategy for improving teacher preparation. [Appendix A includes summary information for the Holmes Partnership, the National Network for Educational Renewal, the Renaissance Group, the Standards-based Teacher Education Project, and Teachers for a New Era.]

Project 30, begun in 1988, was explicitly created to bring together faculty from the arts and sciences and education “to achieve better educated, better prepared teachers through collaborative curriculum design.” The goal of Project 30 remained constant as the organization gained independence as a nonprofit in 1991, and became known first as The Project 30 Alliance and then, in 2000, as the Arts and Sciences/Teacher Education Collaborative (ASTECC). This paper examines whether an independent organization dedicated to promoting and supporting arts and sciences/teacher education collaboration can be self-sustaining and flourish.

The underlying assumption of this study is that faculty from colleges of arts and sciences and colleges of education must work collaboratively on campuses to ensure that, in order to be effective teachers, graduating teacher candidates have sufficient subject matter understanding, broad liberal education, and pedagogical content knowledge. These three themes, among those identified by Project 30 at its inception, are at the heart of many efforts to reform teacher preparation. Not only are these not new ideas, they are no longer provocative or stimulating and therein lies the problem.

Most teacher education programs will insist that they already work closely with colleagues in the disciplines. They point to a Teacher Education Council that serves as the program’s governing body and includes representatives from the arts and sciences; they explain that their secondary school teacher candidates major in a discipline. As the executive director of a leading higher education organization said, “*Faculty believe collaboration is a good idea. It is embedded in the culture. There is no need to keep promoting the idea.*”

Yet, researchers report what many of us know instinctively from our experiences with campuses and teacher education: Teacher preparation programs and courses in the arts and sciences disciplines exist in parallel worlds. While faculty are sometimes brought together through initiatives that offer financial and technical support for collaboration, the curricula of the professional program and the liberal arts remain fundamentally separated rather than complementary parts of an integrated program. The result of this academic isolation is hugely detrimental to teacher candidates and their effectiveness once they begin teaching. Feiman-Nemser and Parker report that, “contrary to popular belief, many beginning teachers have not had adequate opportunities to learn their teaching subjects *before* they begin teaching” (p. 14). And Michael Fullan goes even further to say that “teachers and teacher educators do not know enough about subject matter, they don’t know enough about how to teach, and they don’t know enough about how to understand and influence the conditions around them” (p. 108).

This study focuses on two questions: Is there a need to promote and support collaboration between arts and sciences and education on campuses of higher education? And, if there is, what are possible strategies for doing so? In considering the feasibility of an Arts and Sciences/Teacher Education Collaborative, I reflect on some of the purposes for building collaboration between colleges of arts and sciences and education and review the experiences of Project 30, the antecedent of ASTEC. A number of the lessons that can be learned from other projects that promote collaboration are examined, including some of the challenges for implementing collaboration on a campus. Strategies for encouraging, promoting, and sustaining arts and sciences/teacher education collaboration through an independent organization devoted to this work are outlined at the conclusion of this report.

The study has been conducted through an extensive literature review, including the historical records of both Project 30 and the Standards-based Teacher Education Project (STEP) – two organizations whose missions include specific expectations for collaboration across the colleges. In addition to wide ranging conversations with a variety of policymakers and educators, I conducted interviews with a number of deans, faculty, and education organization executives; distributed a survey to arts and sciences and teacher education deans and associate deans attending a seminar jointly sponsored by the Council of Colleges of Arts and Sciences (CCAS) and the American Association of Colleges for Teacher Education (AACTE); and led a guided discussion with faculty and deans attending a national forum sponsored by the Association of Independent Liberal Arts Colleges in Teacher Education (AILACTE). The two principles underlying these conversations were that (1) teachers must know the content of the subjects they teach, and (2) it is not just the content that they must know in order to be effective teachers.

***Teachers must know the content.*** Standards-based schooling requires that teachers know their subjects. The world of K-12 and teacher education is one of policies and regulations established by state and federal mandates, accreditation agencies, and education commissions. Once a policy is stated, policymakers begin declaring that change has occurred: all teachers are highly qualified; all children learn; no child is left behind; all schools are high performing. Faculty charged with preparing teachers stand at the intersection where theory meets reality and must discover the pathways to get to the ideal “there” from the real “here.”

The No Child Left Behind legislation holds states accountable for making sure that every child meets learning expectations defined by K-12 academic standards. Consider, for example, some of the information and skills that a nine-year old in Mississippi is supposed to learn and be able to demonstrate by the end of fourth grade:

- explore concepts of two and three dimensional geometry;
- learn about probability and the process of data analysis and prediction;
- add and subtract fractions with like and unlike denominators;
- learn the interaction of bodies in the solar system;
- discover the effects of external forces on the Earth’s surface;
- investigate the different forms of energy and the changes in states of matter;
- select, use, compare, and convert different systems of measurement;
- discover the interdependencies of economics;
- explore the meaning and responsibility of citizenship in a state and nation;

- read, analyze, and respond to challenging literature; and
- exhibit knowledge of grammar, mechanics, sentence structure, and standard English.<sup>5</sup>

These academic goals – and they by no means exhaust the list of academic standards for 4<sup>th</sup> grade – define school curriculum and form the basis for high-stakes student assessments that are used to measure a schools’ adequate yearly progress and teachers’ effectiveness in their classrooms.

With such specific goals and assessments in mind, faculty must consider what the education of elementary teachers in Mississippi needs to include in order for them to be successful in teaching a class of 25 nine-year olds to learn and meet these standards. The ubiquity of standards suggests that institutions of higher education need to take the content preparation of teachers more seriously, in terms of both general education courses and the academic major, and collaboration between arts and sciences and education seems a logical response. But, as one dean described the situation, *“This notion is accepted begrudgingly by education and reluctantly by arts and sciences. Since assessment is generally left up to education, there is little incentive for arts and sciences to put much into it.”*

Most future elementary teachers learn the content of the subjects they will teach from their own K-12 education, from general education courses taken during their first two years of college, and from methods courses that offer, at best, a superficial overview of content. Future high school teachers, as well as some middle grades teachers, usually graduate with an academic major in the subject they are licensed to teach.<sup>6</sup> Research has shown that “teachers’ subject matter knowledge affect[s] both the content and processes of instruction, influencing both what teachers teach and how they teach it” (Grossman, Wilson, & Shulman, p. 26). Nevertheless, there is little evidence that the content knowledge needs of future teachers are a priority as faculty develop either general education courses or courses in the major. Many of those interviewed for this report expressed concern about the inadequacy of current programs in preparing teachers to teach the content for which they are responsible. *“The reality,”* said one professor from a College of Education, *“is that K-6 teachers get nothing from a liberal arts program.”* *“There is no connection between Chem 120 and K-6 teachers’ needs,”* said another.

These opinions are supported by research. In their synthesis of research on the effects of coursework in the arts and sciences on new teachers, Wilson, Floden, and Ferrini-Mundy state bluntly that “studies suggest that the subject matter preparation that prospective teachers currently receive is inadequate for teaching toward high subject-matter standards, by anyone’s definition” (p. 9). Such a conclusion should drive an agenda for teacher education reform embedded in strong cross-campus collaboration. Yet the tension between the scholarly, academic world of the liberal arts and the pragmatic, functional world of the teaching profession threatens to overwhelm the suggestion that arts and sciences and teacher education work closely together to ensure the content preparation of new teachers.

***It’s not just the content knowledge.*** Even if a teacher’s course of academic study were aligned with K-12 standards expectations, mastery of the content alone is not sufficient for successful

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<sup>5</sup> *Mississippi State Frameworks* ([www.marcopolo.mde.k12.ms.us/frameworks.html](http://www.marcopolo.mde.k12.ms.us/frameworks.html))

<sup>6</sup> Eleven states still do not require an academic major for a license to teach in secondary schools. (NASDTEC Manual 2004)

teaching. Based on her research on the teaching and learning of mathematics, Ball describes the importance of bridging content and pedagogy:

Put simply, many assume that what teachers need to know is what they teach, along with a broad perspective on where their students are heading. Nothing is inherently wrong with this perspective. However, the lists of what teachers should know that are produced by analyzing the school curriculum are long as well as arbitrary and unsubstantiated. Little is known about how ‘knowing’ the topics on these lists affects teachers’ capabilities. The unexamined conviction that possessing such knowledge is what teachers need to know has blocked the inquiry needed to bring together subject matter and practice in ways that would enable teacher education to be more effective. (2000, p. 244)

We assume that future high school teachers know their content well enough to teach it effectively because, in most states, they are required to graduate with a major in the discipline they will teach. This assumption is also challenged by research. In considering disciplinary perspectives in the teaching of history, Wilson and Wineburg studied four high school teachers certified to teach social studies and assigned to teach history, who had majored in anthropology, political science, American studies, and history:

What is interesting in our findings is the way in which our teachers’ undergraduate training influenced their teaching. The curriculum they were given and the courses they subsequently taught were shaped by what they did and did not know. Thus Fred’s U.S. history course became the study of political science – he not only emphasized politics and economics but organized the entire course around those themes. Unaware of the broad structures of history, he used those of political science to organize and sequence the new information he read about, and then later taught, in American history. In much the same way, Cathy used her knowledge of the structures of anthropology and archeology to make sense of the social sciences she was simultaneously learning and teaching. By using these structures, however, both Cathy and Fred tended to overgeneralize, as was the case with Fred’s claim that all revolutions are the same or Cathy’s belief that governments act in their citizens’ best interests. Generalizing across periods and events, both teachers committed a sin about which historians constantly rail: the failure to consider context.

In a sense, then, it was Fred’s knowledge of political science and Cathy’s knowledge of anthropology and archeology that dominated their curricular choices, but in another important sense, it was their *lack* of knowledge that was most decisive in their instruction. Not knowing that history is as much interpretation as fact, they did not know enough to seek out alternative interpretations. . . . [They] believed that they had learned history once they had accumulated the names, dates, and events they read about in textbook accounts. Just as their disciplinary knowledge limited the ways in which they taught history to their students, so their *lack* of knowledge about history limited their own ability to learn and understand new subject matter. The cognizance of ignorance is an important first stage in learning. In some ways, Fred and Cathy had not yet reached this stage. (pp. 534-35)



Based on studies such as these, Floden and Meniketti conclude that “a significant number of prospective teachers have only a ‘mechanical’ understanding of the subject they will teach. They know rules to follow, but cannot explain the rationale behind the rule. Some invoke inaccurate ‘rules.’ If the ability to explain basic concepts is important for teaching, then the subject matter courses teachers now typically take leave a large fraction of teachers without important subject matter knowledge” (p. 283). These realities underline the need for campuses to rethink teachers’ content preparation in fundamental ways by extending responsibility for teacher preparation across the campus. Schools and colleges of education rarely have faculty with either the content knowledge or expertise to help teachers understand the subject matter in the breadth, depth, and complexity they need to be good teachers. Arts and sciences faculty want the public to understand and support the ideas and the value of their disciplines, and the link between this desire and the work of K-12 teachers needs to be made explicitly. Therefore, not only does teacher education need the cooperation of arts and sciences faculty, but the arts and sciences disciplines need the success of teacher preparation. By working together, arts and sciences and teacher education faculty can recreate teacher preparation around a core curriculum of courses for teachers that present a richer synthesis of key concepts in a discipline with an understanding of underlying concepts.

### ***THE EXPERIENCE OF PROJECT 30***

When the Arts and Sciences/Teacher Education Collaborative (ASTECC) was formally announced in 2000, it recommitted its members to the original five themes of Project 30:

- subject matter understanding;
- general and liberal education;
- pedagogical content knowledge;
- international, cultural, and other human perspectives; and
- recruitment of underrepresented groups into teaching.

These themes defined the intellectual agenda of Project 30 from its founding in 1988 and were the impetus for work conducted by faculty on participating campuses. In order for a campus to address the issues and problems embedded in these five themes, Project 30 believed, it must engage faculty from both the college of education and the college of arts and sciences. Campuses joined Project 30 determined to “ground pedagogy in the arts and sciences and promote the study of discipline-based pedagogy throughout the academy” in order to meet the goal of a redesigned teacher education curriculum.

Project 30 was created by Frank Murray, Dean of Education at the University of Delaware, and Daniel Fallon, Dean of the College of Liberal Arts at Texas A&M, with support from a three-year, \$850,000 grant from the Carnegie Corporation of New York. In applying to join Project 30, campuses named a team leader and team members (including the deans from each college), proposed a work plan for addressing one or more of the themes through work that strengthened relationships across the two colleges, and stated the goals they hoped to accomplish. The president or chief academic officer signed the application, indicating his or her support for the project. Each campus received funds to support its work plan and to cover travel costs for the team to attend Project 30 events.

During its heyday, Project 30 hosted national conferences – at first independently and then in conjunction with the annual meeting of the Council of Colleges of Arts and Sciences (CCAS) – around themes that were deeply rooted in the disciplines. Prior to each meeting participants received three or four articles that would help focus and inform conversation. At the early meetings of Project 30, more than 200 participants attended – with strong representation from faculty in both arts and sciences disciplines and teacher education. By most accounts, the seminar discussions held during the early days of Project 30 were incredibly valuable to faculty from member institutions, offering them the chance to discuss with colleagues from other disciplines and other institutions in depth significant issues related to teaching and learning. Membership in Project 30 provided leverage on campus for accomplishing goals that required faculty collaboration. The work on individual campuses was featured in a series of newsletters as well as in the Year One and Year Two project reports. By the late 1990s, Project 30 launched a website to feature the work of member campuses.

As usually happens with grant-funded projects, significant changes occurred to Project 30 once the financial support from the Carnegie grant ended. The work toward meeting Project 30 goals may have continued on many of the campuses, but fewer faculty had the financial resources to travel and attend the national meetings and, as a result, Project 30 meetings essentially turned into a deans' group. The conversational format centered on thoughtful readings also changed, and participants took a less active role in sessions that now featured key note speakers and panel presentations with “show-and-tell” descriptions of campus activities. In addition, management costs for the project had to be underwritten by the hosting campus as in-kind contribution to the project placing a financial burden on the institution. Dues for membership to Project 30 (\$495 when it became a nonprofit; \$795 after 2001) covered costs for the meeting but did not offer much support for publishing reports and newsletters, maintaining a website, developing and implementing a membership campaign, conducting the logistical planning and work for semi-annual Board of Directors meetings and the annual meeting, or funding staff to support these activities.

The social and political context within which Project 30 was created and flourished also changed. The climate in the late 1980s had been just right for launching Project 30. The 1983 publication of *A Nation At Risk: The Imperative for Educational Reform* challenged the country to take the academic education of its students far more seriously. The report declared that the K-12 system would not be more deficient if it had been created by a foreign power as an act of war against America. Several major reports followed *A Nation At Risk* – including *Profile of a Beginning Teacher* (AACTE, 1983), *Tomorrow's Teachers* (Homes Group, 1986), and *A Nation Prepared: Teachers for the 21<sup>st</sup> Century* (Carnegie Forum on Education and the Economy, 1987) – that called for more rigorous preparation of teachers, stronger content knowledge, and more attention to academics. By the late 1980s, university faculty and administrators were ready to tackle significant work. There was strong public support for education reform led by corporate executives and CEOs, legislators were forcing the issue of reform, and higher education was seen as a key player in the movement to improve teaching and learning as key leaders promoted National Education Goals and K-12 academic standards.

Recognizing that “*the content knowledge required for teachers is much more than the content typical in a major,*” as one former member described it, Project 30 advocated incorporating liberal arts courses into teacher preparation to provide teachers with a more thorough knowledge of the disciplines. The need for teachers to know the subject in depth led to serious conversations on individual campuses about the core liberal arts education of teachers, academic majors for teachers, and the content preparation of elementary teachers. Specific projects to improve teaching and learning were generated out of these conversations, and the work on individual campuses was reinforced through conversations with others at national meetings of the organization. Today, 20 years later, the climate for teacher education reform has changed significantly. Corporate and private foundations show little interest in developing or supporting projects directed toward teacher education reform<sup>7</sup>, and most policymakers and reformers actively seek and promote ways to circumvent rather than to improve teacher education.

Finally, there is the sense that the five themes introduced by Project 30 are no longer compelling to faculty. As one of Project 30’s leaders said, “*The themes of subject matter understanding, liberal arts education, multi-cultural issues, and technology are incorporated into everyone’s work now. Project 30 is not unique in focusing on them. As for pedagogical content knowledge, no one does this because it’s too hard.*”

The newly named organization, ASTEC, has not captured the interest of many Project 30 alumni. No significant marketing campaign was launched to bring in new members, and the benefit of joining an organization with an impressive history was not seen as important. As a collaborative project, institutional membership was not routinely assigned to either the College of Arts and Sciences or the College of Education. Many faculty described limitations set to their travel to academic meetings and said that they found meetings in their own fields to be more appropriate than meetings advocating work with colleagues on issues related to teacher education.

Several long-standing members described attending Project 30/ASTEC meetings that were little more than cyclical conversations among a small group of participants wondering what agenda would be compelling enough to breathe new life into the idea of collaboration. One of them voiced a common refrain in most interviews and conversations: “*I believe that Project 30 has outlived its usefulness; however, the idea of doing something inter-institutional that encourages arts and sciences/teacher education collaboration needs to be perpetuated.*”

## **LESSONS LEARNED**

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<sup>7</sup> Recent comments made by funders discussing teacher education and higher education reforms include: “*We have seen and funded too many initiatives that address problems too late, too superficially, and don’t lead to any tangible results;*” and “*the glacial movement of reform in higher education means that nothing much happens even when a project is deemed successful.*” (summer 2005)

When faculty in the arts and sciences disciplines and the school or college of education collaborate, they share responsibility for the requirements, courses, curricula, and assessments in the teacher preparation program. They make decisions jointly and both are held accountable for how well candidates know their content and can teach it so that K-12 students learn at grade level. There are a number of administrators and faculty who find the argument for collaboration between arts and sciences and teacher education attractive and believe it to be the obvious and natural way to improve teacher preparation. There is, however, a compelling argument against collaboration that is based on the realities of most campuses. Faculty in the arts and sciences are educated and trained to explore their disciplines in isolation and, in some cases, to protect the discipline from the dirty fingers of application. Faculty rewards of promotion, tenure, and salary increases are almost exclusively linked to “pure” scholarship rather than the kinds of service and pedagogy-oriented work that collaboration requires. On the other hand, K-12 education, and by extension teacher education, are caught up with the processes of moving children from the ignorance of pre-kindergarten into the experiences and knowledge of 12<sup>th</sup> grade and citizenship. While teachers’ subject matter knowledge is a key piece of this process, it is only one piece and for many education faculty not a very interesting piece. The administrative processes dear to the hearts of education faculty bore others who would, rightly speaking, rather engage their minds on comparative sonnet sequences or experiments to stop light. In the hierarchy of higher education, the best minds are assumed not to be those who bother with teacher preparation. It has even been argued by some that the professional training of a new generation of teachers is not a suitable responsibility of a university and should take place at the school district level.

Advocates of collaboration are warned that the higher education environment is hostile: *“There is not a good flow of information across most campuses. All the talk of collaboration seems to assume that there is.”* As another dean put it, *“Collaboration is an unnatural act between two unwilling partners.”* This attitude, shared by many of the deans and faculty members interviewed for this report, is also reflected by the way in which collaboration is practiced on many campuses. *“Some universities think they’re doing collaboration – and even get credit for doing collaboration – when it’s really just mathematicians teaching ed courses in the math department,”* explained one person. Another described the situation in teacher education on his campus by saying, *“There are ten INTASC Principles. The first one, on content knowledge,<sup>8</sup> is addressed by arts and sciences; the other nine are addressed by education. In reality, collaboration on this campus means each one doing his bit.”*

The experiences from projects that have advocated cross-campus collaboration provide cautionary lessons for rebuilding ASTEC or an ASTEC-like organization. For example, it is clear that, at a minimum, there must be compelling, practical reasons to engage faculty from the colleges in spending significant time together. Many faculty are willing to work collaboratively when the purpose and strategies are well defined and the effort coincides with institutional goals or reforms. To be effective on any campus, collaboration must be promoted and supported by the deans of both colleges; the deans’ support is enhanced when the provost or academic vice president shows interest in the work. The work must be directed by a well-respected campus leader who generates commitment from a group of faculty willing to work together. Ideally,

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<sup>8</sup>*Making content meaningful:* The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of subject matter meaningful for students.

campus administrators offer modest financial support and release time or other institutional rewards for faculty engaged in the collaboration. While faculty appreciate knowing how collaboration has worked successfully on other campuses, they benefit most by creating a cross-campus relationship at their own institution that meets specific challenges it faces with students and its teacher education program. An often unstated goal of funded projects is to institutionalize the collaborative relationship on the campus; the difficulty in doing so may be illustrated by the comment of one dean who said, *“Why is it so important that we keep doing something forever?”* That comment also reflects the challenges to building and sustaining collaboration that are evident in the lessons learned by the various projects reviewed for this study.

**Collaboration needs a purpose.** To persuade the two faculties to work together, collaboration must be seen to serve a strategic purpose for the institution – as in meeting state and national accreditation goals, actively participating in a national project, or responding to a president’s vision. Although faculty may acknowledge a nobler good of attending to future teachers because “it’s the right thing to do,” there are not many compelling intellectual incentives for collaboration around teacher education.

Many arts and sciences faculty are suspicious of the teacher education enterprise and are reluctant to invest their time even when the goal for collaboration is to improve the subject matter preparation for future teachers. In spite of working with colleagues from the school of education, they describe the teacher preparation program as offering *“content-free courses, easy requirements, and show-and-tell assessments.”* (“Scrapbooks” is a term sometimes used for the portfolio assessments popular in most teacher education programs.) It troubles arts and sciences faculty that schools of education routinely graduate extraordinarily high numbers of teachers with honors. Education faculty are often unwilling partners in collaboration because they are reluctant to share authority for preparing teachers. They believe that effective teachers benefit most from a curriculum that concentrates on methods instruction, classroom management skills, and school-based experiences; in fact, many do not really think teacher candidates are weak in their subject-matter knowledge: *“They know the content; they just don’t know how to teach it,”* said one education dean. *“Learning teaching strategies is ultimately the most important tool of the teacher and doesn’t really differ from one subject to another.”*

A central purpose for building cross-campus collaboration has been to facilitate faculty understanding for the interdependency of content and pedagogy in training new teachers for their work. As one dean wrote on her survey form, *“Don’t split between the intellectual and professional; they need to be joined.”* The survey, distributed to deans and associate deans attending a Special Seminar on Collaboration in Teacher Preparation,<sup>9</sup> asked them to rank the importance of focusing an organization promoting collaboration on (1) educating arts and sciences faculty on issues related to pedagogy and (2) educating education faculty on issues related to disciplinary content. All of the arts and sciences deans responded that it was most important to “educate arts and sciences faculty on issues related to pedagogy.” In particular, they said: *“This is key to understanding of issues.”* They suggested that such education occur *“especially in collaboration with learned societies”* and that the collaborative work focus on

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<sup>9</sup>Titled “Partnerships between Colleges of Education and Colleges of Arts and Sciences that Work!”, the seminar was co-sponsored by CCAS and AACTE and held in Denver, Colorado, September 19-21, 2004.

*“unpacking standards and bridging the separate disciplines.”* Fewer arts and sciences responders thought that education faculty needed to learn about issues related to disciplinary content; *“some knowledge, but in depth not necessary,”* wrote one; *“it is the concept of content that needs understanding.”* [An explication of that final statement could support an industry of workshops.]

Responses from education deans were more mixed. Only one-third of those responding thought it important for arts and sciences deans to learn about issues related to pedagogy and advised that *“ASTECC needs to collaborate with the respective professional organizations.”* Two-thirds of the education deans thought it moderately important for education faculty to learn about issues related to disciplinary content, and one education dean suggested a broader collaboration that includes school personnel, *“We need to think and work K-16.”*

In considering the nature of ASTEC or an ASTEC-like organization, people usually spoke in very general terms about the need for faculty in each college to understand better the issues and challenges of the other college. Only with direction did they reflect on the implications of collaboration for redesigning the requirements, courses, and assessments in teacher education to ensure strong pedagogical content preparation for teacher candidates. “Content pedagogy,” a concept in the research literature since the mid-1980s, is not on the radar of those interviewed. This disjuncture with one of the primary themes of Project 30/ASTEC confirms the comment made by one of Project 30’s founders: *“Pedagogical content knowledge is not taking fire. It has not coalesced into a teacher education program.”*

Several of those interviewed advised an ASTEC-like organization to build its message of collaboration around the immediate demands of accreditation and licensure standards, suggesting that most campuses preparing for accreditation exclude arts and sciences faculty from any role other than compliance. As one education leader suggested, ASTEC should frame its mission around answering the question, *“What are ed schools being asked to do, and how can we help?”*

**Collaboration needs the support of campus leaders.** Colleges and universities are not organized to promote collaboration. The research interests and teaching responsibilities of most higher education faculty are specialized within a narrow field of a single discipline, and faculty receive little encouragement and almost no financial or professional support for collaborating with colleagues in other fields or other disciplines. Projects that promote collaboration as a means to improve and strengthen teacher preparation have discovered that the commitment and involvement of the deans is necessary to build bridges between disciplines and across colleges. *“The deans’ involvement is crucial”* is a refrain echoed in interviews, conversations, and survey responses. Deans offer leadership, support, and an expectation for faculty involvement that creates a climate for collaboration. They lend credibility to the work by attending on-campus meetings and representing the work at national conferences. On some campuses, for example, deans extended personal invitations to faculty in their respective colleges to join a select cross-campus group for dinner and discussion of teaching and learning in higher education. This small and exclusive group of faculty became the focal point for developing proposals for collaborative work in teacher education, academic research, and other areas.

Many of the projects formally invite the provost or academic vice president to support the collaboration by signing project contracts, attending national meetings, and overseeing project management. The visible interest of the provost enhances the status of the project on campus and promotes the active commitment of the deans and the faculty. On several campuses the provost or associate provost has guided collaboration by linking the project to broader college goals (regional accreditation, for example) and providing financial support for faculty release time and campus meetings. Presidents' attention to improving teacher education benefits the work on the campus, of course, but they are rarely interested in this topic. In 1999, the American Council on Education published *To Touch the Future: Transforming the Way Teachers Are Taught: An Action Agenda for College and University Presidents*, a report that encouraged cross-campus collaboration led by presidential vision and guidance. However, an executive of a higher education organization explained bluntly that, "*other than issuing broad statements of support, organizations that serve college and university presidents are not interested in teacher education and their members do not want to work with deans.*" Conversations with faculty and deans confirmed this assessment.

**Collaboration needs strong leadership and faculty commitment.** The success of cross-campus collaboration depends in large measure on the qualifications of the faculty member responsible for directing the work. Project activities directed by someone not well respected by faculty from both the arts and sciences disciplines and education falter and, even with backing from a provost, are not conducive to improving the quality of teacher education.

Those interviewed from campuses engaged in collaborative work advised that "*functional, operational roles on campus need to be clearly defined.*" They declared that, as with any project, "*you must pick people who work well together*" and warned that "*not everyone will get on board – marginalize them.*" While some advised that joint appointments between colleges can promote collaboration, others warned that such a solution often led to the marginalization of the disciplinary faculty member who worked directly with teacher candidates and the college of education.

Such comments speak to the difficulty of engaging faculty in the applied work of preparing future teachers to be effective in the classroom. One person offered the following example: "*assessing candidate content knowledge based on the candidate's evaluation of student work would yield rich information if it were jointly analyzed by education and arts and sciences. But the work is too hard, takes too much time, and offers no reward.*" Many of those committed to Project 30 and similar projects expressed their frustration in questions like, "*What is the carrot to get faculty interested in doing this?*" Clearly, changing the university rewards structure of promotion, tenure, and salary increases to accommodate the service-oriented work of collaboration is an obvious step a college or university should make, and administrators who value collaboration need to foster change in the way the campus acknowledges this work.

**Money helps.** From the experiences of each of the national projects devoted to collaboration, small amounts of money – at a minimum to subsidize on-campus meetings and travel costs for faculty to attend national meetings – are almost required to facilitate the work on any campus. The point of collaboration is to bring people together, either on campus or across campuses, and such activity generates the costs associated with meetings: time, space, materials, and sometimes

food. With project funds, many campuses host retreats to take faculty away from the campus for a day or two of intense dialog and inquiry into issues related to the scholarship of teaching. All of the arts and sciences deans who responded to the survey said that such dialog was important, and teams of arts and sciences and education deans wrote the following comments: “*This [dialog] should really be strongly based in the disciplinary areas.*” “*Anything to promote real people talking face-to-face is valuable.*” “*Get faculty away from campus so they can focus on collaboration.*”

**Faculty benefit by seeing what works.** National accreditation and state program approval often look for evidence of the involvement of arts and sciences faculty in the teacher education program, and many education deans and directors describe the difficulty of engaging colleagues across the campus in the program. Presentations and poster sessions that feature examples of collaborative projects and activities are featured at many of the meetings hosted by teacher education initiatives and are included in published project reports.<sup>10</sup> Several of the deans who responded to the survey were not interested in an organization whose purpose would be to create “new” models of collaboration, and wrote: “*We don’t need new models. We need sustainable models and demonstrations.*” Comments from teams that included arts and sciences and education deans explained, “*[Creating new models] is not so important because each college or university is unique in terms of culture, etc., therefore each collaborating model will by definition be new.*” However, all of the arts and sciences deans thought that “publicizing lessons learned from existing models of collaboration” would be an important purpose for ASTEC, and restated their recommendation of “*sustainable models best.*” Even those who were not persuaded that it would be wise to reinvigorate ASTEC as a stand-alone organization expressed the need for higher education institutions to learn about strategies that have been successful. One offered that hearing about models was “*really quite tedious*” but, during the same conversation, said that “*we need greater awareness of what works.*”

A leading arts and sciences dean spoke about the importance of giving faculty the chance to talk together and gain practical information on “what works”: “*It is important for faculty to have the chance to step outside individual disciplines, individual interests, and see issues from other perspectives.*” She expressed further the need to encourage faculty, with small grants, to explore research ideas that require cross-campus and K-16 collaboration to undertake.

**To succeed, the collaborative relationship must be formalized.** One lesson, consistent among the various initiatives that promote cross-campus collaboration, is that campus activities that are identified exclusively with specialized projects remain outside the ongoing priorities of the university. When collaboration is believed to be, itself, the point of the bringing faculty together – when there is no larger vision for the work to be accomplished through collaboration – campuses will find it hard to sustain the relationship. As one executive cautioned, “*preserving parity between arts and sciences and education is unworkable in higher education.*”

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<sup>10</sup> For example, *The Reform of Teacher Education for the 21<sup>st</sup> Century*. Year One Report. (Project 30/University of Delaware, 1989); *Project 30 Year Two Report: Institutional Accomplishments* (University of Delaware, 1991); *Developing Knowledgeable Teachers: A Framework for Standards-based Teacher Education Supported by Institutional Collaboration*. The STEP Reports, 1, ii (AACTE, 2003).



To institutionalize the goals of collaboration, many campuses establish a standing task force or committee of faculty from both colleges that serves as the governing body of teacher education – not just for preparing secondary school teachers. It is important to incorporate collaboration into institutional roles and structures because, as one dean admitted, “*volunteer-dependency means it is hard to sustain the work.*” This committee would develop the goals and work plan of the program, oversee the implementation of candidate assessments at various points during their preparation, hold regular meetings throughout the year, and report to the campus as a whole on improving teacher education.

Keeping collaboration an indispensable element of teacher preparation means that each of the “lessons learned” becomes integrated into the teacher education program. A strong leader, widely respected on campus and committed to collaborative teacher education, is needed to keep that focus front and center in the decisions about improving the program and to facilitate discussions among faculty from a variety of disciplines in both colleges. In addition, the leader must also garner support – administrative, financial, and technical – to keep faculty engaged in the work.

### ***RECOMMENDATIONS FOR NEXT DIRECTIONS***

Thus far in this feasibility study of ASTEC, I have described the important role that collaboration between arts and sciences and education faculty could play in ensuring reliably strong preparation of new teachers for the standards-based, high accountability system of K-12 education today. I have outlined experiences of faculty and deans who were involved in Project 30/ASTEC as well as from a number of other teacher education initiatives that promote collaboration with colleagues across the campus. Finally, I have described five elements that are essential to any successful collaborative effort on a campus. This discussion has been reinforced by research as well as by comments made by faculty, deans, and education organization leaders in interviews, conversations, and at meetings.

The study began by asking two questions: Is there a need to promote and support collaboration between arts and sciences and education on campuses of higher education? And, if there is, what are possible strategies for doing so? The need for and importance of collaboration are also reinforced by *The Secretary’s Fourth Annual Report on Teacher Quality*<sup>11</sup> which describes the first strategy for improving teacher preparation programs as making sure that “teacher education [is] a university-wide commitment” (p. 16). Two recurring sentiments that specifically address the first question are reiterated in the following statements, each offered in interviews with education organization executives. First, “*No independent forum currently exists for people to meet to discuss these issues.*” Second, “*...the idea of doing something inter-institutional that encourages arts and sciences/teacher education collaboration needs to be perpetuated.*”

As the experience of Project 30/ASTEC demonstrates, an independent organization dedicated to cross-campus collaboration is not financially viable. Because there is a widely

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<sup>11</sup> U.S. Department of Education, Office of Postsecondary Education, *The Secretary’s Fourth Annual Report on Teacher Quality: A Highly Qualified Teacher in Every Classroom*. (Washington DC 2005); <http://www.title2.org/>.

accepted sense that such an organization serves an important purpose, the question becomes one of where to house it and how to manage its activities. The two national associations that act as umbrella organizations for arts and sciences and education are the Council of Colleges for Arts and Sciences (CCAS) and the American Association of Colleges for Teacher Education (AACTE). They may seem comparable because they each serve the deans of their respective colleges. The associations, however, are very different in terms of mission, governance structure, staffing, accountability, and support. According to its website, “CCAS serves as a forum for the exchange of ideas and information among deans of arts and sciences representing the member colleges and as a representative of the liberal arts and sciences at a national policy-making level. The Council further seeks to support programs and activities to improve the intellectual stature and public understanding of the disciplines of the arts and sciences.” CCAS has a university-based executive director without a full staff, elected officials who serve one-year terms, and a board of directors. CCAS hosts three or four workshops a year on the administrative role of running departments and colleges and, at its annual meeting, includes sessions focusing on faculty concerns, professional development for associate/assistant deans, management strategies, funding, and diversifying faculty. Some leaders at CCAS commented that ASTEC “*assumes an interest by CCAS that is not necessarily there,*” and others in the association were unaware of ASTEC or its mission and did not find teacher education to be particularly of interest.

AACTE, with a membership of 780 institutions of higher education, represents the institutional interests of collegiate-based teacher education. It is a fully-staffed organization, based in Washington, DC, and run by a President/CEO with advice from a board of directors comprised of deans of teacher education and higher education administrators. Through a number of programs and publications, AACTE gathers and disseminates data, proposes and analyzes public policy initiatives, supports professional advancement and networking, and represents the teacher education community before state and national governments. AACTE sponsors a special study group on teacher education/arts and sciences collaboration, runs teacher education reform projects that include collaboration as a primary activity, and features sessions at its annual conference on the role of arts and sciences in the preparation of teachers.

Over the past several years, CCAS and AACTE have held joint annual seminars for new deans and associate deans to discuss the value and purposes of collaboration, to learn from the experiences of those campuses that have used collaborative relationships to improve teacher education, and to outline strategies for implementing collaboration when they return to campus. These workshops were described as particularly helpful by many of those interviewed for this project, and one has been scheduled for September 25-26, 2006.

**Housing and managing ASTEC.** Practically speaking, efforts to improve teacher education have the best chance to influence the industry when they are housed at the American Association of Colleges for Teacher Education (AACTE), the association directly connected to many of the higher education institutions that prepare new teachers. The fear has always been that arts and sciences faculty will be reluctant to attend workshops or meetings sponsored by AACTE and focused exclusively on teacher education issues. That this is a valid concern is evident by the fact that many arts and sciences faculty are not comfortable working collaboratively with teacher educators on their own campuses. “*When I cross campus for one of these meetings,*” said a dean

of natural sciences at a Georgia STEP institution, *“I have to turn a switch in my head so I can understand the jargon and the issues related to teacher education.”* AACTE members should have a vested interest in making collaboration work. Colleges of teacher education are held accountable for the quality of teachers they graduate by both the National Council for Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC), the two national accreditors of teacher education, as well as by state departments of education and federal Title II reporting. In addition to co-sponsoring the annual seminars for deans and associate deans with CCAS, AACTE has formed a special study group (SSG), “Arts and Sciences Collaboration with Teacher Education,” that is framed by the Project 30 principles and vision. All AACTE special study groups meet at least annually at sessions held at the AACTE national meeting.

The first step for resurrecting ASTEC would be through the Arts and Sciences Collaboration with Teacher Education SSG, which is directed by the dean or director of a teacher education program. A proposal for a revitalized ASTEC could be presented at the scheduled session of the study group at the 2006 AACTE annual meeting. Invitations to attend will be mailed to members of the Project 30 network, faculty from STEP alumni and current STEP campuses, members of Teacher for a New Era (TNE), former National Faculty members, members of the PhysTEC (Physics Teacher Education Coalition), members of the Renaissance Group, Holmes Group, the National Network for Educational Renewal (NNER), and the Association of Independent Liberal Arts Colleges and Teacher Education (AILACTE). Initially, ASTEC work could be supported by AACTE staff working with the faculty director to generate membership and broaden activities beyond the single session held at the AACTE annual meeting. During the first six months of the work, ASTEC would:

- Identify members of an advisory group that includes strong representation from arts and sciences.
- Hire a staff person with support help to manage the work.
- Use some of the existing funds from ASTEC to conduct a marketing campaign to generate membership.
- Design and manage the annual CCAS/AACTE deans’ workshop.

Depending on the initial response to this work, ASTEC could undertake two other activities during 2006:

- Develop an on-line conference on arts and sciences/teacher education collaboration.
- Create a website and on-line newsletter to promote arts and sciences/teacher education collaboration.

**Reinvigorating an ASTEC agenda.** Three objectives for an ASTEC-type organization surfaced repeatedly during the course of conducting this study and would be initially proposed as work to be promoted and undertaken by the group.

1. Promote effective collaborations by showcasing successful collaborations through website, newsletters, and at sessions at professional meetings, and by providing advice on how to emulate what works.
  - Showcase institutions that can show effective practice:
    - Create and post an online newsletter that features relevant material (research, articles, news on collaboration).

- Reissue Project 30's Year Two Report that features examples of arts and sciences/teacher education collaboration.
  - Create and maintain web site.
  - Nurture press contacts.
  - Provide technical support/advice in creating and sustaining collaboration:
    - Through a network of faculty consultants, provide help with creating and implementing a core curriculum for elementary teachers that includes interdisciplinary courses for K-12 teachers; team teaching; collaboration with community colleges and K-12 teachers.
    - Provide help with real assessment of content knowledge.
    - Create a database with models.
2. Convene meetings that disseminate demonstration projects through annual meetings of the AACTE SSG and the CCAS/AACTE annual workshop. Host sessions at discipline conferences and at the CCAS annual meeting. Develop an online conference at which a few speakers “present” papers and host real-time discussion among participants and other papers are posted for four-week period to be read at any time, generating on-line discussion. At this time, AACTE is preparing to host the annual CCAS/AACTE seminar on collaboration for teacher education in September 2006. Depending upon the response to the AACTE SSG meeting in January, this workshop could become the meeting at which a new ASTEC is launched.
3. Challenge members to develop and promote a research agenda that examines questions that are at the heart of teacher preparation and would benefit by the joint examination by faculty from the disciplines as well as teacher preparation. These questions include:
- How does the academic preparation of teacher benefit student learning?
  - How does an arts and sciences/teacher education collaboration influence the preparation of teachers?
  - Are teachers who have been prepared in a program noted for strong collaboration effective teachers? How do they compare (in terms of student learning, principal evaluations, etc.) with teachers prepared in programs isolated from colleagues in the disciplines?
  - What constitutes content knowledge? What evidence demonstrates teacher candidates' content knowledge?
  - How do effective teachers develop over the course of their careers and what role does liberal arts play in that development?
  - How are long term effects of liberal arts education manifest in a teacher's pedagogy?

In their review of teacher preparation research, Wilson, Floden, and Ferrini-Mundy noted that “no research ... directly assessed prospective teachers' subject matter knowledge and then evaluated the relationship between teacher subject matter preparation and student learning” (p. 6) and that “no research ... directly assesses what teachers learn in their pedagogical preparation and then evaluates the relationship of that pedagogical knowledge to student learning or teacher behavior” (p. 12). A dean of liberal arts and leader in the Council of Colleges for Arts and Sciences (CCAS) suggested the importance of including a research component on the agenda for ASTEC or a similar organization.

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## APPENDIX A.

TABLE OF ORGANIZATIONS PROMOTING ARTS & SCIENCES/TEACHER  
EDUCATION COLLABORATION

<i>Organization</i>	<b>HOLMES PARTNERSHIP</b> <a href="http://www.holmespartnership.org">www.holmespartnership.org</a>
<i>Purpose</i>	Founded in 1986 as The Holmes Group, the Holmes Partnership is a consortium of universities, public school districts, teachers associations and local as well as national organizations to reform teaching and learning whether in a public school or a higher education setting, to professionalize teacher preparation, and to link institutions of higher education and K-12 schools.
<i>Executive Structure</i>	Board of Directors, elected to staggered three-year terms, consists of 12 voting officers selected from member partnerships and partners, 1 partnership member from each of the five regions, 5 partnership members at large, 1 Holmes Scholar, 1 representative from the Holmes Scholar Alumni Association, 1 representative from UNITE, plus other members not to exceed 35. Board leadership consists of a chair, vice chair, secretary, and treasurer.
<i>Management</i>	President and seven vice presidents (equity and urban initiatives; Holmes scholars; partner relations; partnership recruiting, development, and support; programming; publications, dissemination, and public relations; and research). Office maintained at the host institution of the current president (University of Milwaukee-Wisconsin).
<i>Membership</i>	65 local partners (at least one institution of higher education, at least one school district, and at least one local teacher organization); 7 national partners (various teacher organizations, accreditation organizations, research organizations, and other national organizations committed to the agenda, goals, and objectives of the Holmes Partnership)
<i>Dues</i>	Affiliate partner: \$2,500; Local partner: \$4,000; National partner: \$7,500
<i>Products</i>	Annual conference as well as Holmes Scholars initiatives; conducting and publishing research; focusing on equity and urban initiatives which encompass the work of UNITE and other urban partnerships.

<i>Organization</i>	<b>NATIONAL NETWORK FOR EDUCATIONAL RENEWAL (NNER)</b> <a href="http://depts.washington.edu/cedren/nner/about/index.htm">http://depts.washington.edu/cedren/nner/about/index.htm</a>
<i>Purpose</i>	Based on the vision of John Goodlad and created by the Center for Educational Renewal (University of Washington) in 1986, the NNER is a membership network dedicated to the simultaneous renewal of schools and the institutions that prepare teachers. NNER is based on the four-part mission of providing equal access to quality learning for all students, promoting responsible stewardship of our schools and universities, improving teaching and learning through pedagogy that nurtures and challenges all learners, and providing students with the knowledge, skills, and dispositions to become fully engaged participants in our democracy society.
<i>Executive Structure</i>	NNER work proceeds under the aegis of a Governing Council made up of representatives from each of the participating settings. A Tripartite Council, which recommends policy to the Governing Council, has equal representation from all three parties (schools, arts & sciences, and teacher preparation) from each of the NNER partnership settings. The Governing Council includes one representative from each setting, selected by the setting, and the tri-chairs. If tripartite representation on the Governing Council becomes unbalanced, the council can elect up to six at-large members from the Tripartite Council to serve on the Governing Council.
<i>Management</i>	The Governing Council was chaired by Carol Wilson, Executive Director of the Colorado Partnership for Educational Renewal, a collaborative initiative that now includes 16 colleges and the Colorado Community Colleges system in Denver. Not clear who chairs since Wilson's July 2005 retirement. NNER office is maintained at the University of Washington.



<i>Membership</i>	NNER consists of 24 settings in 20 states and 1 Canadian province. (Some settings involve one institution of higher education in partnership with local P-12 schools. Other settings involve two or more institutions of higher education in partnership with P-12 schools.)
<i>Dues</i>	\$5,000 annually per setting
<i>Products</i>	Reports and conferences. Membership in NNER offers opportunities for subgrants to work in specific areas, a network of colleagues and advisors, and the cachet of working with others on the Goodlad reform agenda.

<i>Organization</i>	<b>RENAISSANCE GROUP</b> <a href="http://education.csufresno.edu:16080/rengroup/">http://education.csufresno.edu:16080/rengroup/</a>
<i>Purpose</i>	Formed in 1991, the Renaissance Group espouses a set of operating principles to guide its pursuit of quality and best practices in teacher education. These guiding principles affirm the importance of the education of teachers as an all-campus responsibility, a campus culture that values and models quality teaching, the creation of partnerships with practicing professionals, the extensive use of field experiences in diverse settings, the adherence to high standards and accountability, a focus on student learning, the effective use of technology, and the development of teachers as creative and innovative leaders.
<i>Executive Structure</i>	The Executive Committee consists of an Executive Director and twelve voting members, elected for three-year terms that are renewable once. The voting membership of the Committee will include four university presidents, four vice presidents for academic affairs, and four deans of education. No institution has more than one voting member on the Executive Committee.
<i>Management</i>	The Executive Director is appointed by the Executive Committee for a three-year term, is eligible for re-appointment, and is located at the member institution hosting the Consortium. (A member institution is selected by the Executive Committee to host the consortium's administrative office for a period of three years beginning on July 1 and ending June 30.) The Renaissance Group is currently housed at California State University Fresno.
<i>Membership</i>	Membership consists of 35 institutions of higher education in which the presidents, vice presidents for academic affairs, and deans of education support the purposes and action agenda described in the Constitution. Official representatives are limited to the president, vice president for academic affairs, and dean of education at member institutions. The National Board of Professional Teaching Standards is also listed as a member of the organization.
<i>Dues</i>	Membership dues are payable to the Executive Director of the Consortium. The fee is to be recommended by the Executive Committee and approved by the majority of voting representatives. Should a university decide to withdraw after paying dues, no reimbursement is made.
<i>Products</i>	Teacher Work Sample; reports, conferences, links

<i>Organization</i>	<b>STANDARDS-BASED TEACHER EDUCATION PROJECT (STEP)</b> <a href="http://www.aacte.org/programs/standards_practice/step.htm">www.aacte.org/programs/standards_practice/step.htm</a>
<i>Purpose</i>	STEP was created in 1997 and is based on three foundational principles: teachers must know the subjects they are teaching; teachers must know how to teach students to learn at high levels; and teachers must know how to monitor and assess how well students learn. Colleges and universities participating in STEP improve their teacher education programs and procedures to ensure that new teachers graduate with knowledge, skills, and abilities consistent with those principles.
<i>Executive Structure</i>	STEP institutes and supports working committees of faculty representing the Arts and Sciences, Education, K-12 schools, and two-year colleges as they align teacher education with K-12 academic content standards and teacher licensure standards and develop the evidence that their graduating teachers have the content knowledge and teaching skills to improve student learning. A national advisory board guided STEP during its first five years (1997-2002).

<i>Management</i>	STEP is led by deans from Arts and Sciences and Education on each campus, supported by the provost or academic vice president. The national initiative is directed by STEP staff at AACTE.
<i>Membership</i>	35 campuses in Georgia, Maryland, Indiana, Kentucky, Mississippi, and Virginia have participated in STEP.
<i>Dues</i>	None
<i>Products</i>	Newsletter (online & hard copy), reports, workshops, conference presentations

<i>Organization</i>	<b>TEACHERS FOR A NEW ERA (TNE)</b> <a href="http://www.teachersforanewera.org">www.teachersforanewera.org</a>
<i>Purpose</i>	Launched in 2001, Teachers for a New Era is organized by three design principles: First, a teacher education program should be guided by a respect for evidence, including attention to pupil learning gains accomplished under the tutelage of teachers who are graduates of the program. Second, faculty in the disciplines of the arts and sciences must be fully engaged in the education of prospective teachers, especially in the areas of subject matter understanding and general and liberal education. Finally, education should be understood as an academically taught clinical practice profession, requiring: close cooperation between colleges of education and actual practicing schools; master teachers as clinical faculty in the college of education; and residencies for beginning teachers during a two year period of induction.
<i>Executive Structure</i>	Carnegie Corporation of New York, the project's primary funder, oversees progress at individual sites through a network of consultants and advisors. The Rand Corporation and MDRC are evaluating TNE.
<i>Management</i>	Each participating institution has an internal project director to manage TNE on campus. The AED National Institute for Work and Learning (NIWL) is providing technical support and capacity building to the higher education institutions participating in the initiative through site support, technical assistance brokering, and cross-site workshops and Institutes.
<i>Membership</i>	Eleven institutions were selected to participate in TNE: Bank Street College of Education, Boston College, California State University - Northridge, Florida A&M University, Michigan State University, Stanford University, University of Connecticut, University of Texas at El Paso, University of Virginia, University of Washington, and University of Wisconsin, Milwaukee.
<i>Dues</i>	None
<i>Products</i>	Online newsletter, workshops, conference presentations

## APPENDIX B.

### Report on Building Liberal Arts/Teacher Education Collaboration: the ASTEC Questionnaire administered at the CCAS-AACTE Seminar, 9/20/04, Denver, CO

The survey was distributed to the participants; they were encouraged to respond as representatives of their individual colleges (arts and sciences or education) or jointly as a team. The general discussion that both preceded and followed the distribution of the survey centered on the pros and cons of joining an organization that promotes collaboration between arts and sciences and education. A summary of the discussion follows.

Each item of the survey was measured on a 6-point rating, from 1 (important) to 6 (unimportant), and was accompanied by space for explanatory comments. The responses were analyzed in three categories: 1-2 = important; 3-4 = moderately important; 5-6 = not important. The purpose of the survey was to gather information about the interest of a self-selected group of collaborative deans about the mission, purpose, and feasibility of ASTEC or an organization like ASTEC. A copy of the survey appears in Appendix C.

**QUESTION 1: Purpose of the organization** included seven items:

1. To educate arts and sciences faculty on issues related to pedagogy
2. To educate education faculty on the issues related to disciplinary content
3. To create new models of collaboration
4. To publicize lessons learned from existing models of collaboration
5. To support dialog and inquiry into issues related to the scholarship of teaching
  - (5a) To support face-to-face dialog (seminars, etc.)
  - (5b) To support on-line dialog (discussion boards, list serves, etc.)
6. To publish on-line peer-reviewed articles promoting collaboration
7. To organize sessions at National conferences that promote collaboration to strengthen teaching

**FIRST PURPOSE:** To educate arts and sciences faculty on issues related to pedagogy

ARTS AND SCIENCES RESPONSES: 100% of A&S ranked this purpose as important.

Their comments include: *"In collaboration with learned societies; they have more cultural clout"* and *"This is key to understanding of issues."*

EDUCATION RESPONSES: mixed: 37.5% = important; 62.5% = moderately important. A comment from the Education deans was to suggest that *"ASTEC needs to collaborate with the respective professional organizations."*

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 80% thought this purpose was important; 20% thought it was moderately important. Comments from the teams included: *"If by 'pedagogy' we mean teacher ed issues, then it's a 1"*; and *"Not enough thought has been applied here."*

**SECOND PURPOSE: To educate education faculty on the issues related to disciplinary content**

ARTS AND SCIENCES RESPONSES: 40% of A&S ranked this purpose as important; 37.5% ranked it as moderately important; and 20% ranked it as not important. Their comments include: *“This is a 2 or 3 – It is the concept of content that needs understanding.”*

EDUCATION RESPONSES: mixed: 37.5% = important; 50% = moderately important; 12.5% = not important. There were no comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 80% thought this purpose was important; 20% thought it was moderately important. Comments from the teams included: *“Some knowledge, but in depth not necessary.”*

**THIRD PURPOSE: To create new models of collaboration**

ARTS AND SCIENCES RESPONSES: mixed: 20% of A&S ranked this purpose as important; 40% = moderately important; 20% = not important. Their comments include: *“We don’t need new models. We need sustainable models and demonstrations.” “Why build new wheels?”*

EDUCATION RESPONSES: mixed: 50% = important; 37.5% = moderately important; 12.5% = not important. A comment from the Education deans was *“We do not need new models; we need sustainable models.”*

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 60% thought this purpose was important; 40% thought it was moderately important. Comments from the teams included: *“This is not so important because each college or university is unique in terms of culture, etc., therefore each collaborating model will by definition be new.” “This is important because it is necessary to be successful with NCATE and the state.”*

**FOURTH PURPOSE: To publicize lessons learned from existing models of collaboration**

ARTS AND SCIENCES RESPONSES: 100% of A&S ranked this purpose as important. Their comments include: *“Sustainable models best.”*

EDUCATION RESPONSES: mixed: 75% = important; 25% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: mixed: 20% thought this purpose was important; 60% thought it was moderately important; 20% thought it was not important. Comments from the teams included: *“Helps but not essential.” “Sometimes this is really tedious!”*

**FIFTH PURPOSE: To support dialog and inquiry into issues related to the scholarship of teaching**

ARTS AND SCIENCES RESPONSES: 100% of A&S ranked this purpose as important. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: mixed: 75% = important; 25% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 80% thought this purpose was important; 20% thought it was moderately important. Comments from the teams included: *“Yes, but this should*

*really be strongly based in the disciplinary areas.” “Anything to promote real people talking face-to-face.” And “This relates to the A&S faculty knowledge of pedagogy.”*

**Fifth purpose, part (a): To support face-to-face dialog (seminars, etc.)**

ARTS AND SCIENCES RESPONSES: mixed: 40% of A&S ranked this purpose as important; 40% as moderately important; 20% did not rank this item. There were no comments from the Arts and Sciences deans.

EDUCATION RESPONSES: mixed: 62.5% = important; 25% = moderately important; 12.5% did not rank this item. There were no comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 80% thought this purpose was important; 20% thought it was moderately important. Comments from the teams included: *“Anything to promote real people talking face-to-face.” “Getting faculty away from campus so they can focus on collaboration.”*

**Fifth purpose, part (b): To support on-line dialog (discussion boards, list serves, etc.)**

ARTS AND SCIENCES RESPONSES: mixed: 40% of A&S ranked this purpose as important; 20% = moderately important; 20% = not important. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: mixed: 25% = important; 50% = moderately important; 12.5% = not important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 20% thought this purpose was important; 20% thought it was moderately important; 40% thought it was not important. Comments from the teams included: *“Too easy to ignore.”*

**SIXTH PURPOSE: To publish on-line peer-reviewed articles promoting collaboration**

ARTS AND SCIENCES RESPONSES: 20% of A&S ranked this purpose as important; 80% = moderately important. Comments from the Arts and Sciences deans: *“Who will read this?”*

EDUCATION RESPONSES: mixed: 37.5% = important; 62.5% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 80% thought it was moderately important; 20% thought it was not important. Comments from the teams included: *“Problem here is that time is limited and proliferation of resources can have reverse effect – no reading of any.” “Not a very powerful forum.”*

**SEVENTH PURPOSE: To organize sessions at National conferences that promote collaboration to strengthen teaching**

ARTS AND SCIENCES RESPONSES: mixed: 60% of A&S ranked this purpose as important; 20% = moderately important; 20% did not respond. Comment from the Arts and Sciences deans: *“depends on conference.”*

EDUCATION RESPONSES: mixed: 62.5% = important; 37.5% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 80% thought this purpose was important; 20% thought it was moderately important. Comments from the teams included: *“To integrate this theme into existing organizations seems like a great idea because travel funds are limited and conference attendance can be compromised. “National discipline conferences as well as teacher education.”*

**QUESTION 2: Value of an ASTEC-type organization** included six potential attributes, three of which included sub categories:

1. To develop a faculty network of people working on similar issues  
(1a) – on individual campuses  
(1b) – nationally
2. To promote sharing of syllabi, etc.  
(2a) – on individual campuses  
(2b) – nationally
3. To offer opportunities for discussion across disciplines and colleges  
(3a) – on individual campuses  
(3b) – nationally
4. To strengthen the content preparation of teachers
5. To help campuses meet state and federal accountability standards
6. To build a group of faculty committed to learning how better to prepare teachers

**FIRST ATTRIBUTE: To develop a faculty network of people working on similar issues**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important. Others did not respond to this section of the survey, saying: *“never heard of this organization before yesterday, therefore unable to respond – not knowledgeable enough regarding the need of any of these values.”* Other comments from the Arts and Sciences deans include: *“how to keep together?” “how to get new people involved?” “need \$\$.”*  
EDUCATION RESPONSES: 50% thought this attribute was important; 12.5% = not important; others did not respond. No comments from the Education deans.  
RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 60% thought this attribute was important; 20% thought it was moderately important; others did not respond. No comments from the teams.

**First attribute, part a: To develop a faculty network of people working on similar issues on individual campuses**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important; 20% = moderately important; others did not respond to this section of the survey. No comments from the Arts and Sciences deans.  
EDUCATION RESPONSES: 75% thought this attribute was important; 12.5% = moderately important; 12.5% = not important. Comment from the Education deans: *“difficult to sustain.”*  
RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 60% thought this attribute was important; 40% thought it was moderately important. Comment from the teams: *“more important in selected courses.”*

**First attribute, part b: To develop a faculty network of people working on similar issues nationally**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important; others did not respond to this item. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: 62.5% thought this attribute was important; 12.5% = moderately important; 12.5% = not important; others did not respond to this item.

Comments from the Education deans include: *“more difficult to sustain.”* *“Difficult to get started.”*

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 60% thought this attribute was important; 40% thought it was moderately important. Comment from the teams: *“not practical.”*

**SECOND ATTRIBUTE: To promote sharing of syllabi, etc.**

ARTS AND SCIENCES RESPONSES: 20% of A&S ranked this attribute as important; 20% = moderately important; others did not respond to this item. Comment from the Arts and Sciences deans: *“Problematic as many faculty view syllabi as ‘theirs.’”*

EDUCATION RESPONSES: 25% thought this attribute was important; 25% = moderately important; 12.5% = not important; others did not respond to this item. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 20% thought it was moderately important; 40% = not important; others did not respond to this item. No comments from the teams.

**Second attribute, part a: To promote sharing of syllabi, etc. on individual campuses**

ARTS AND SCIENCES RESPONSES: 40% of A&S ranked this attribute as important; others did not respond to this item. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: 62.5% thought this attribute was important; 37.5% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 20% thought it was important; 40% = moderately important; 40% = not important. No comments from the teams.

**Second attribute, part b: To promote sharing of syllabi, etc. nationally**

ARTS AND SCIENCES RESPONSES: 20% of A&S ranked this attribute as important; 40% = moderately important; others did not respond to this item. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: 62.5% thought this attribute was important; 12.5% = moderately important; 25% = not important. Comment from the Education deans: *“might be helpful in some disciplines but often the content is packaged differently.”*

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND

SCIENCES/EDUCATION: 40% thought this attribute was moderately important; 60% = not important. No comments from the teams.

**THIRD ATTRIBUTE: To offer opportunities for discussion across disciplines and colleges**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important; others did not respond to this item. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: 37.5% thought this attribute was important; 12.5% = moderately important; others did not respond to this item. Comment from the Education deans: *“would be helpful to have a third party facilitate this.”*

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 40% thought this attribute was important; others did not respond to this item. No comments from the teams.

**Third attribute, part a: To offer opportunities for discussion across disciplines and colleges on individual campuses**

ARTS AND SCIENCES RESPONSES: 40% of A&S ranked this attribute as important; others did not respond to this item. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: 37.5% thought this attribute was important; 12.5% = moderately important; others did not respond to this item. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 100% thought this attribute was important. No comments from the teams.

**Third attribute, part b: To offer opportunities for discussion across disciplines and colleges nationally**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important; others did not respond to this item. No comments from the Arts and Sciences deans.

EDUCATION RESPONSES: 75% thought this attribute was important; 25% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 100% thought this attribute was important. No comments from the teams.

**FOURTH ATTRIBUTE: To strengthen the content preparation of teachers**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important; 20% = moderately important; others did not respond to this item. Comment from the Arts and Sciences deans: *“take care of this, and the next item follows.”*

EDUCATION RESPONSES: 75% thought this attribute was important; 25% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 50% thought this attribute was important; 50% = moderately important. Comments from the teams include: *“This would seem to be the faculties’ responsibility.”* *“Outcome of the collaboration; not a primary purpose.”*

**FIFTH ATTRIBUTE: To help campuses meet state and federal accountability standards**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this attribute as important; 20% = not important; others did not respond to this item. No comments from the Arts and Sciences deans [but see comment above].



EDUCATION RESPONSES: 75% thought this attribute was important; 25% = moderately important. No comments from the Education deans.  
RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 80% thought this attribute was important; 20 & = moderately important. Comments from the teams include: *“this is too localized for a national organization.” Outcome of collaboration; not a primary purpose.”*

**SIXTH ATTRIBUTE:** To build a group of faculty committed to learning how better to prepare teachers

ARTS AND SCIENCES RESPONSES: 40% of A&S ranked this attribute as important; 20% = moderately important; others did not respond to this item. No comments from the Arts and Sciences deans.  
EDUCATION RESPONSES: 87.5% thought this attribute was important; 12.5% = moderately important. No comments from the Education deans.  
RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: No ranking of this item was done by the teams. Comment from the teams: Outcome of collaboration; not a primary purpose.”

**QUESTION 3: Audience for the organization** listed five potential audiences for an ASTEC-like organization:

1. Graduate students
2. Faculty
3. Deans
4. Provost/academic vice president
5. President

3a. How would the organization be promoted differently for different audiences?

3b. What would the organization offer to different audiences?

**FIRST AUDIENCE:** Graduate Students

ARTS AND SCIENCES RESPONSES: 40% of A&S ranked this audience as important; 20% = moderately important; 20% = not important; others did not respond to this item. Comment from the Arts and Sciences deans: *“these are your future faculty.”*  
EDUCATION RESPONSES: 37.5% thought this audience was important; 62.5% = moderately important. No comments from the Education deans.  
RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 20% thought this audience was important; 20 & = moderately important; 40% = not important. No comments from the teams.

**SECOND AUDIENCE:** Faculty

ARTS AND SCIENCES RESPONSES: 100% of A&S ranked this audience as important. Comment from the Arts and Sciences deans: *“troops.”*  
EDUCATION RESPONSES: 87.5% thought this audience was important; 12.5% = moderately important. No comments from the Education deans.  
RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 80% thought this audience was important; others did not respond to this item. No comments from the teams.

### **THIRD AUDIENCE: Deans**

ARTS AND SCIENCES RESPONSES: 100% of A&S ranked this audience as important. Comments from the Arts and Sciences deans include: *“All must support in an open and recognizable way.” “Has to work with the troops.”*

EDUCATION RESPONSES: 87.5% thought this audience was important; 12.5% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 80% thought this audience was important; others did not respond to this item. No comments from the teams.

### **FOURTH AUDIENCE: Provost/Academic VP**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this audience as important; 40% = moderately important. Comments from the Arts and Sciences deans include: *“All must support in an open and recognizable way.” “Has to support.”*

EDUCATION RESPONSES: 37.5% thought this audience was important; 62.5% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 20% thought this audience was important; 40 & = moderately important; 20% = not important; others did not respond to this item. No comments from the teams.

### **FIFTH AUDIENCE: President**

ARTS AND SCIENCES RESPONSES: 60% of A&S ranked this audience as important; 40% = moderately important. Comments from the Arts and Sciences deans include: *“All must support in an open and recognizable way.” “Has to have buy-in.”*

EDUCATION RESPONSES: 50% thought this audience was important; 50% = moderately important. No comments from the Education deans.

RESPONSES FROM A COLLABORATIVE TEAM OF ARTS AND SCIENCES/EDUCATION: 20% thought this audience was important; 20 & = moderately important; 40% = not important; others did not respond to this item. No comments from the teams.

### **Short answer questions on potential audience for an ASTEC-like organization.**

#### **QUESTION 3a. How would the organization be promoted differently for different audiences?**

##### **RESPONSES BY ARTS AND SCIENCES DEANS:**

- *Provide different services: professorial development; information*
- *For Faculty & Students: Impact on learning and preparation of future students*
- *For Admin.: Impact on institutions' accountability*

##### **RESPONSES BY EDUCATION DEANS:**

- *Models and case studies for faculty*
- *Structure and theory for administrators*
- *I believe that the basic message would and should be the same: that content is important for teachers and that collaboration between A&S and education is the only way.*

- *For all audiences, it should be promoted as a group that can improve student learning P-16!*
- *I do not understand how ASTEC is or will be different than STEP. If STEP does these things, then why is ASTEC needed?*

RESPONSES BY A TEAM OF ARTS AND SCIENCES AND EDUCATION DEANS:

- *Functional/operational role for deans through management/oversight; by VP for vision setting; by president for rewards for each, and therefore, the reasons for doing it would differ*
- *Pitch it to the deans: a university would join and it would mean that the education college and arts & sciences deans would be members – an institutional membership*
- *Graduate students: establish student chapters on campuses*

**QUESTION 3b. What would the organization offer to different audiences?**

RESPONSES BY ARTS AND SCIENCES DEANS:

- *Different resources and support systems*

RESPONSES BY EDUCATION DEANS:

- *What about the allegiance of former STEP grant colleges as a basis from which to draw/form a new organization?*
- *A deeper understanding of the connections among P-16 education.*
- *I do not understand how ASTEC is or will be different than STEP. If STEP does these things, then why is ASTEC needed?*

RESPONSES BY A TEAM OF ARTS AND SCIENCES AND EDUCATION DEANS:

- *Perspectives of their peers in different roles within the same organization*
- *Pitch it to the deans: a university would join and it would mean that the education college and arts & sciences deans would be members – an institutional membership*
- *Graduate students: develop collaborative culture from the start*
- *Faculty: networking and support to do collaboration*
- *Provost/President” get them to buy in and provide resources*

**QUESTION 4: Experiences with existing organizations/projects.** Participants were asked for their comments and/or impressions of seven organizations or projects that, in part, promote collaboration between arts and sciences and education.

1. AILACTE (Association of Independent Liberal Arts Colleges and Teacher Education)
2. Holmes Partnership
3. NNER (National Network for Educational Renewal)
4. Project 30/ASTEC
5. Renaissance Group
6. Standards-based Teacher Education Project (STEP)
7. Teachers for a New Era (TNE)

No participant provided an answer to this part of the survey. One comment (repeated) quoted in the above section reflects the participation of deans from two STEP campuses.