# Directory of Academic Interventions and Learning Enrichment Activities

©2006 David Arendale, Ph.D., Asst Prof, College of Education & Human Development, Univ. of Minnesota; David@Arendale.org

## Overview

Selecting the appropriate academic intervention or making a change in institutional policies is contingent upon many factors. What is the unique academic and culture issues at the institution and which academic intervention is best fitted to meet those needs? Is there clear evidence that the intervention will contribute to higher academic achievement at a particular institution as opposed to its past success as the institution where it was first developed? What is the capacity of the institution to implement the intervention or policy regarding administrative support, faculty support, skill level of the intervention program, and the cost to implement and continue the program?

## Continuum Scales of Requirements for Implementation

An academic intervention or policy decision on one campus may not be effective on another one due to a variety of reasons. The following document presents a decision-making process that helps to more objectively enable institutions to compare among possible actions or intervention programs which are most appropriate for their particular situation. The five continuum scales are: (1) *likelihood of success: evidence of effectiveness*; (2) *institutional and administrative involvement*; (3) *faculty member involvement*; (4) *skill level of the people who are part of the campus academic intervention*; and (5) *financial investment for the intervention program*. Some scores have "n.a." since the scale item is not applicable. Some scales have two scores, one for the student paraprofessional and one for the person who is involved with program administration frequently. The scale listed with the "*likelihood of success*" is arranged in order of increasing evidence, each of the other four continuum scales are arranged in increasing levels of involvement required by the institution to implement the program (*for example, "1" is the lowest level of energy*). No judgement is made about the relative value of one intervention or policy decision with another one. Academic interventions or policy changes with high scores simply require more time and resources to implement than others.

## Directory of Academic Interventions and Learning Enrichment Activities

Attached is a summary of some of the most often cited programs or policy decisions in the professional literature related to increasing student academic achievement. Each entry has the following pieces of information: name of item; site of origin or name of the leading professional organization(s) associated with the practice; description of the item; professional association web sites or publications that provide more information about the item; and continuum scale scores for the level of difficulty to implement the program or policy change. There is no score regarding the likelihood of success since that must be evaluated based on the research materials provided by institution or organization promoting its adoption. (*For example, there are many types of tutoring programs and approaches. This document does not attempt to generalize about all tutoring programs.*)

# Five Continuum Scales

## I. Likelihood of Success: Evidence of Effectiveness Scale

A prerequisite to selection of an academic intervention or making changes in campus policies is to carefully evaluate the evidence for effectiveness and the capacity of the individual or institution that originally created the practice to provide additional information and training. Time limitations often preclude answering all of the following questions during a conference presentation, but it is reasonable for them to be addressed in professional articles, conference handouts, and during follow-up discussions with presenters. The following scale provides an increasing level of evidence of the likelihood of success in implementing the practice.

1. ***There is little evidence or documentation that the practice has any evidence of effectiveness or is based on current research-based educational theory.***

2. ***Practice is based upon sound educational theory and other previously validated successful practices.***
A. What is the theory base for development of the intervention? Theory must lead practice, especially when considering the student population to be served.
B. What other programs or practices similar to the one under scrutiny have been validated in the past? Most successful innovations are always based on elements of previously developed successful programs.

3. ***Practice has undergone rigorous evaluation at one institution.***
A. What were the quantitative and/or qualitative research procedures employed? Are they rigorous and state-of-the art? Are they appropriate for the type of research questions being asked? Use of simple t-Tests or student surveys are insufficient for research studies today. Rather than comparing to other research studies published, what are the new evaluation procedures being discussed at national association conferences such as AERA?

B. Does the program make claims that are unsubstantiated or overreaching? This is especially important if the practice is making claims related to student retention and graduation rates. The further the distance of time between when the intervention occurs and the outcome is measured, the less likely the impact. Too many intervening variables will have an impact upon the student in the mean time. Such claims must be supported by highly sophisticated evaluation procedures.

C. Does the research evaluation model take into account that the student has been impacted by multiples variables. Perhaps they have participated in simultaneous intervention programs? With hundreds of variables having an impact upon students, the likelihood that only one intervention is responsible for the results is less likely.

D. If the academic intervention model is a complex one with several activities operating simultaneously, how has the research evaluation model identified the contributing impact of each separate activity upon the student outcomes? This is especially important if students have choices on which activities that they participate. Maybe some optional activities are more helpful that others. Perhaps it is not necessary to implement all parts of a complex intervention model since only a few contribute the majority of the impact to the desired effects. With tight budgets and limited resources, academic interventions will need to demonstrate their cost effectiveness as well as the improved student outcomes.

E. Do the quantitative research procedures take into account background information about the individual students when conducting the analysis? Examples of this would include student demographic, affective domain (*e.g., academic content mastery orientation, academic performance orientation, self-efficacy*) and academic preentry attributes as part of the research model? If the research model does not do so, the reported positive results may be due to the participation of students who were more academically prepared or motivated.

F. What is the cost/benefit equation for the intervention? Careful factoring of all expenses associated with implementation is needed. For example, supervision and training costs are often under reported in conference presentations and journal articles.

Often the most expensive component of an intervention is not the direct salaries, but the time required for activities both by the direct service provider and those who administer, supervise, and train. The professional literature often cites these elements for many intervention programs to be effective.

4. ***Practice has undergone evaluation at one institution over a period of time with consistent results of positive outcomes.***
Have the research studies been carefully replicated over succeeding academic terms at the institution that originally developed the intervention? One of the most powerful research findings is the consistent report of positive outcomes over a long period of time. This helps to avoid the "Hawthorne Effect" of introducing something new of the environment and promoting short-term increased productivity before the environment returning back to the previous baseline behavior level.

5. ***Practice has been validated by one or more external agencies*** (*e.g., accrediting agencies, peer-reviewed publications, national awards competitions*)
What does a review of the professional literature suggest about this or similar academic interventions for effectiveness? Publication of research about the intervention by a peer-reviewed journal increases the likelihood of effectiveness since it requires approval by a unbiased third-party editorial staff. Review by external accrediting agencies and national organizations conducting rigorous awards programs can serve a similar purpose.

6. ***Practice has been replicated successfully at several other institutions in addition to the one that originally created it.***
Has the academic intervention been successfully implemented at other institutions? Were the results replicated over succeeding academic terms? Were the institutions similar to the one considering its adoption? Were the students served at the other institutions similar to the one considering its adoption? An affirmative answer to these question increases the chance that the program can be successfully installed at another institution. This helps to address the potential problem that some programs are more dependent on the personality and traits of the original developer and less on the actual

program components. In these cases, rarely is the program successful elsewhere.

7. ***There is additional sources of information, consultation services, and training workshops about successful implementation of the practice.***
Will the institution or individual that developed the intervention program allow visitors to view the program in operation and talk with key individuals including the students who are served? Will it sell or share materials and consultation services? Considering the potential economic and social impact of implementation of a potential new program or policy, it is critical to more fully understand the challenges with implementation and ongoing operation. Few conference presenters have the time nor inclination to share the challenges, failures, and details with program implementation. Unfortunately, this is a missed opportunity to learn valuable lessons. Considering the total cost of starting and operating a new program, this is a small investment of time and money.

## II. Institutional/Administrative Involvement Scale

1. There is no need for institutional support to implement this activity or policy.
2. Actions are taken by individual faculty members and academic departments. There are no significant institution-wide activities or policies to support academic interventions.
3. Policies related to academic intervention programs are based on national standards (*e.g, College Reading and Learning Assoc.: Mentor and Tutor Training Certification http://crla.net; Council for the Advancement of Standards: Academic Advising; Learning Assistance Program; Student Orientation; and TRIO and Other Educational Opportunity Programs http://www.cas.edu; National Assoc. for Developmental Education Self-Evaluation Guides http://nade.net*)
4. Institution systematically collects and disseminates cognitive and motivational information about students when they enter the institution to academic advisors, academic intervention program managers, and other key campus individuals (*e.g., ACT and SAT standardized exam scores, ACT Profile data, Cooperative Institutional Research Program [CIRP] Survey, high school rank percentile,*

*Learning and Study Strategies Inventory, Motivated Strategies for Learning Questionnaire, Noel Levitz College Student Inventory, various vendor produced standardized course content assessments.*)

5. Individual course professors administer short 10 to 20 minute course content assessments on the first day of class to confirm appropriate class enrollment and encourage participation in voluntary intervention programs.

6. Institution systematically conducts evaluation studies regarding the effectiveness of its academic intervention programs using rigorous procedures as suggested by the American Educational Research Assoc., Council for the Advancement of Standards, and the National Assoc. for Developmental Education.

7. Institution uses college pre-entry information about students *to recommend placement* into courses and participation in academic intervention programs.

8. Institution uses college pre-entry information about students for *mandatory placement* into courses and participation in academic intervention programs.

9. Institution has committed sufficient local economic resources and political power to implement academic interventions deemed essential by campus policymakers, faculty members, staff members, and students.

### III. Faculty Member Support/Involvement Scale

1. *Not supportive* of academic interventions since the faculty person believes that his/her course is designed to serve as a gatekeeper to eliminate or redirect (*from their perspective*) inappropriately enrolled students in the class to another lower-level course or to change academic majors.

2. *Indifferent* to academic interventions due to priorities in other areas. Does not have time to do any additional work.

3. *Mildly interested* in academic interventions, but has *little time* to do additional work. Mildly supportive of services available for students in the class.

4. *Strongly interested* in academic interventions, but has *little time* to do additional work. Highly supportive of services available for students in the class.

5. *Strongly interested* in academic interventions, and has *limited time* to develop and administer a short 10 to 20 minute course placement assessment instrument on the first day of class. The results of the assessment could confirm correct course placement, encourage transfer to more appropriate course, or to encourage student to seek academic assistance.

6. *Strongly interested* in academic interventions and has *moderate time* to engage in supplemental course activities (*e.g., administer course placement assessment, develop student worksheets, provide limited supervision and training of student helper, develop additional curriculum materials*)

7. *Strongly interested* in academic interventions and has *extensive time* to engage in supplemental course activities (*e.g, administer course placement assessment, develop student worksheets, supervise and train student paraprofessional helper, develop extensive additional curriculum materials*).

8. *Strongly interested* in academic interventions and will *integrate them* into the course lecture sessions (*e.g., critical thinking activities, model use of learning strategies with content material, develop extensive additional curriculum materials*).

### IV. Skill Level of Direct Service Provider Scale

1. No prerequisite skill level required.
2. Undergraduate student skill level required.
3. Graduate or professional student skill level required.
4. Full-time faculty or staff member skill level required.

### V. Financial Investment Level Scale

1. No significant financial costs required.
2. Minor expenses related to supplies.
3. Salary for undergraduate student paraprofessional.
4. Salary for graduate student paraprofessional.
5. Salary for part-time faculty or staff member or release time/overload for currently employed full-time faculty or staff.
6. Requires addition of new full-time faculty or staff member to teach or to supervise the academic intervention.

# Academic Interventions, Learning Enrichment Activities, and Policy Changes

Following are some of the most commonly cited programs or policy changes associated with improved student outcomes. The scale ratings for each of the items has been assigned by the author of this document illustration of the minimum level of energy to commonly implement. These ratings may be different depending on the campus culture and the manner in which the program or policy has been implemented by a particular institution. Some scores have "n.a." since the scale item is not applicable. Some scales have two scores, one for student paraprofessional and one for the person who needs to be involved in administration of the program on a frequent basis.

| *Name:* **Academic Advising** <br> The leading professional association for this area is the National Academic Advising Association. <br> Scale scores for this item assume a faculty-only advising model. | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | 4 | 5 | 4 | 5 |

*Description:* Academic advising models vary widely across the U.S. : delivered by faculty members, others by non-teaching staff, and others with a combination of the two. Ender, Winston, and Miller have defined developmental academic advising as "a systematic process based on close student-advisor relationship intended to aid students in achieving educational, career, and personal goals through the utilization of the full range of institutional and community resources. It both stimulates and supports students in their quest for an enriched quality of life…(It) reflects the institution's mission of total student development and is most likely to be realized when the academic affairs and student affairs divisions collaborate in its implementation." "Academic advising is a developmental process which assists students in the clarification of their life/career goals and in the development of educational plans for the realization of these goals. It is a decision-making process by which students realize their maximum educational potential through communication and information exchanges with an advisor; it is ongoing, multifaceted, and the responsibility of both student and the advisor."

*For More Information:* http://www.nacada.ksu.edu/; Winston, R. B.; Miller, T. K.; Ender, St. C.; & Grites, T. J. (1984). Developmental academic advising. San Francisco: Jossey-Bass.

| *Name:* **Accelerated Learning Groups** <br> Developed at the University of Southern California by Dr. Sydney Stansbury in 1991 and adopted by several institutions since then. | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | 5 | 5 | 2, 4 | 3, 5 |

*Description:* The objective for ALGs is to identify students who have below average prerequisite skills for a course and assist them in strengthening these skills. While originally designed to compliment Supplemental Instruction sessions offered in conjunction with a historically-difficult course, ALGs could serve as a stand-alone program. To identify students, faculty members develop a content-specific pretest for their course. Each identified student has an individual educational plan (IEP) developed for them by a trained learning strategist and students are matched on similar prerequisite skill levels. The learning strategist meets frequently with the ALG facilitator to monitor progress and adjust the IEP. The focus is on mastering prerequisite skills for the specific course. ALG sessions are facilitated by a trained tutor and supervised by a learning skills specialist. Students attend both ALG sessions and SI sessions (if available for the course) each week. ALG attendance is discontinued when the student is able to pass another version of the instructor-developed pretest assessment.

*For More Information:* Dr. Sydney Stansbury, E-mail: sydbury@yahoo.com; Stansbury, S. (2001). Accelerated Learning Groups enhance Supplemental Instruction for at-risk students. Journal of Developmental Education, 24 (3), 20-40.

| *Name:* **Administrator and Policymaker Endorsement** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | **9** | **n.a.** | **n.a.** | **1** |

*Description:* Some actions taken by senior management of an institution can have a positive impact for demonstrating the importance and value of academic interventions and changes in the campus learning environment. Examples of these actions include: involvement in and final approval of the mission statement/goals for the campus learning center; inclusion of statements and goals regarding academic interventions and programs in campus-wide strategic planning documents; occasional public statements of endorsement and value of academic intervention programs and improvements in the campus learning environment.

*For More Information:*

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| *Name:* **Counseling and Career Development** The leading professional associations for this area are the American College Counseling Association, American Counseling Association , American School Counselors Association, National Career Development Association, and the American College Personnel Association. | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | **8** | **n.a.** | **4** | **6** |

*Description:* Counseling services offered by certified professionals help students with academic, personal/social, and career development issues. Many of these issues are deeply intertwined with one another, thereby affecting the student in multiple dimensions. It requires considerable skill for the service providers to assess and then deliver service to these individuals. These issues are critical variables that impact upon students' decisions regarding persistence and graduation.

*For More Information:* http://schoolcounselor.org/; www.collegecounseling.org; http://www.counseling.org/; http://www.ncda.org/; http://www.myacpa.org/

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| *Name:* **Developmental Education Courses** *(Sometimes called Compensatory or Remedial Courses)* The National Center for Developmental Education is located at Appalachian State University (Boone, NC). There are several professional associations in this area. | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | **8** | **7** | **4** | **5** |

*Description:* A developmental education course offered by a post-secondary institution is generally designed to build upon existing academic skills of a student to facilitate student success in the core curriculum of an institution. Approximately one-third of all admitted college students enroll in one or more DE courses in such subject areas as English, mathematics, reading, and study skills. Most courses count for institutional credit towards federal financial aid, but often do not count towards college graduation requirements.

*For More Information:* http://nade.net; http://crla.net; http://www.ncde.appstate.edu/

| Name: Embedded Study Strategy Instruction within Content Courses<br>Developed at the General College of the University of Minnesota-Twin Cities (Minneapolis, MN) | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 9 | 8 | 4 | 5 |

**Description:** First and second-year content courses have embedded within them instruction and practice of study strategies. Immediate application is made of the strategies with the course content in lectures and textbook readings. This mainstreamed approach to developmental education eliminates the need for separate prerequisite developmental courses and assures concurrent development of the learning skills and the content material. The General College is in process of creating a professional development model for other colleges that will enable them to implement this model of curriculum building, integration of academic skills into the academic content of first and second year college courses, and delivery of student services (including advising and transfer models). The model has been recognized through a series of national awards and documented through institutional research studies.

*For More Information: http://www.gen.umn.edu/; http://www.gen.umn.edu/research/crdeul/;* Dr. David Taylor, Dean of the General College, University of Minnesota-Twin Cities, 128 Pleasant Street SE, 109 Appleby Hall, Minneapolis, MN 55455; 612-625-2880

| Name: Emerging Scholars Program (*Sometimes called Academic Excellence Workshops; Berkeley Professional Development Program; Calculus Workshop Model; Mathematics Workshop Program*)<br>Developed by Uri Treisman at the Univ. of CA-Berkeley in the late 1970s and implemented elsewhere. | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 7 | 6 | 2, 4 | 3, 5 |

**Description:** The focus is for under represented science, math, and engineering (SME) students to excel at the university rather than merely to avoid failure, therefore the program is promoted as an honors program and not a remedial one. Students are enrolled in a traditional lecture section of a class of all ethnic groups. In addition to attending the lecture, workshop students met in structured groups of 10-12 students twice a week for two-hour sessions to work collaboratively on problems. Group leaders working closely with class instructors, comprised of upper-division minority undergraduate SME students, directed the problem-solving activities by facilitating sessions and constructing worksheets with problems that reinforce concepts or expose weaknesses in understanding. Periodic social activities are offered to build mutual student support. Discussions also include orientation to the campus culture and success strategies.

*For More Information:* Treisman, P. U. (1985). A study of the mathematics performance of black students at the University of California, Berkeley. Doctoral dissertation

| Name: Faculty Development Activities | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 9 | 6 | 4 | 5 |

**Description:** Improvements in the teaching and learning process are generally linked to higher student academic outcomes and persistence rates. A growing number of institutions are developing faculty development centers that provide a wide range of services including: teaching effectiveness workshops; newsletter of teaching suggestions; new faculty orientation seminar series; mentor programs between senior and junior faculty members; one-on-one consultation services; library of books and videotapes on teaching/learning; microteaching labs where instructors can record and their privately review their classroom lectures; providing mini-grants for curriculum and methodology revision; periodic group discussions; sponsorship of an annual conference and awards programs for teaching excellence.

*For More Information:* Boice, R. (1992). The new faculty member: Supporting and fostering professional development. San Francisco: Jossey-Bass; Eble, K.E.; & McKeachie, W. J. (1985). Improving undergraduate education through faculty development. San Francisco: Jossey-Bass.

| Name: Freshmen Year Experience Course The National Center for the First Year Experience and Students in Transition is at the Univ. of South Carolina (Columbia) & The Policy Center on the First Year of College is at Brevard College (Brevard, NC) | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 9 | 2 | 4 | 5 |

**Description:** To help a newly admitted student to become an active participant in the campus community and a successful student by utilizing the tools, campus resources, and strategies presented during this class. These classes vary in duration and academic credit. While often taught by faculty members, other members of the campus community may serve as primary instructors/facilitators such as administrators, support staff, and graduate students. The content of the courses vary widely, though commonly they address career exploration, academic study skills, campus resources, institutional history, and campus culture issues.

*For More Information:* http://www.sc.edu/fye/; http://www.brevard.edu/fyc/

| Name: Learning Centers National leaders for this area are Dr. Martha Maxwell and Prof. Frank Christ in the 1960s. Several professional associations represent this area including the National College Learning Center Association | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 7 | 3 | 2, 4 | 3, 6 |

**Description:** A Learning Support Center, one of many campus academic support programs and services, is defined as an administrative entity and/or location on a college or university campus with a primary mission to assist students to learn more in less time with greater ease and confidence and a secondary mission that extends its services and programs to faculty, staff, administration, and the surrounding community. A Learning Support Center may administer, partner with, or broker such programs as Tutoring, Supplemental Instruction, Student Orientation, Study Skills Workshops, Labs for ESL Conversation, Writing, Reading, and Math.

*For More Information:* http://www.pvc.maricopa.edu/~lsche/; http://www.eiu.edu/~lrnasst/nclca/index.html; http://crla.net; http://nade.net

| *Name:* **Learning Communities** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| A leading organization promoting learning communities is The Washington Center for Improving Undergraduate Education | 8 | 8 | 4 | 5 |

*Description:* Learning communities encompasses a variety of approaches that link or cluster classes during a given term, often around an interdisciplinary theme, that enroll and common cohort of students. This represents an intentional restructuring of students' time, credit, and learning experiences to build community among students, among students and their teachers, and among disciplines. There are a variety of models. One is the "linked course" model. For example, the same group of students who scored low on college entrance exams are enrolled as a cohort in both a study skills course and a first-year course such as American History I. Textbook, lecture, and homework from the history class are used in the study skills course to apply the new learning skills that are developed.

*For More Information:* http://www.evergreen.edu/washcenter/; http://www.bgsu.edu/colleges/as/clc/rlcch/; http://learningcommons.evergreen.edu/

| *Name:* **Mandatory Testing and Placement** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | 8 | 3 | 4 | 5 |

*Description:* Standardized college entrance test such as the ACT and SAT are most useful for predicting cumulative grade point averages and college graduation rates. However, they are less useful at predicting performance in individual courses. For this reason, additional content and affective domain testing is warranted to more accurately predict specific course achievement and for recommending student participation in academic enrichment activities described elsewhere in this document.

*For More Information:* http://www.ncde.appstate.edu/

| *Name:* **Mentoring** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| An international organization prominent in this field is Peer Resources. | 3 | 3 | 2, 4 | 3, 5 |

*Description:* A process whereby a more knowledgeable and experienced person actuates a supportive role of overseeing and encouraging reflection and learning within a less experienced and knowledgeable person, so as to facilitate that persons' career and personal development. Examples of this would include college graduates or upperclass students who meet with younger students to provide encouragement, application of course work to the college major or the world-or-work.

*For More Information:* http://www.crla.net/mentorcert.htm;; http://www.islandnet.com/~rcarr/peer.html

| *Name:* **National Standards** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| The leading professional association for this area is the Council for the Advancement of Standards. Other professional associations have collaborated with CAS and developed standards for their field. | 9 | 2 | n.a. | 1 |

*Description:* Several organizations have published national standards and guidelines for programs associated with academic interventions, learning centers, and developmental education in general. Observance of these standards is associated with higher outcomes for students and the institution. Regular review of these standards provides opportunities for improve the quality of the program, lobby for additional campus resources, and increase outcomes for students and the campus community. These documents were published by the Council for the Advancement of Standards, College Reading and Learning Association, National Association for Developmental Education and involved other professional associations associated with the particular practice.

*For More Information:* http://www.cas.edu/; http://www.crla.net/tutorcert.htm;; http://www.crla.net/mentorcert.htm;; http://libweb.sfasu.edu/nadecb/index.html

| *Name:* **Orientation Program** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| The leading professional association in this area is the National Orientation Directors Association. | 3 | 2 | 3, 4 | 3, 5 |

*Description:* Orientation program refer to a wide range of activities and programs sponsored by the institution to assist students with a successful transition to postsecondary education. These activities may include activities before the formal beginning of classes such as one or multi-day programs that include academic testing, campus tours, overview to academic and student services, and academic advising. Other options include retreats that focus on team-building and social orientation to the campus culture. Freshmen year experience seminars (*described elsewhere in this document*) may be offered just prior to classes or during the academic term.

*For More Information:* http://www.nodaweb.org/

| *Name:* **Peer-Led Team Learning (PLTL)**. PLTL was originally developed at the City University of New York in the mid 1990s. Support through a grant from the National Science Foundation has assisted in the model being adopted by more than 100 institutions. | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | 7 | 6 | 2, 4 | 3, 5 |

*Description:* Peer-Led Team Learning (PLTL) is an innovative model in science education. Student-leaders (peers) guide the activities of small groups of students in weekly Workshop meetings. The students work through challenging problems that are designed to be solved cooperatively. The peer leaders are trained to ensure that the students are actively and productively engaged with the material and with each other. This method offers benefits: supportive format encourages questions and discussions that lead to conceptual understanding; students learn to work in teams and to communicate more effectively; peer leaders learn teaching and group management skills.

*For More Information:* National PLTL website, http://www.pltl.org and http://www.sci.ccny.cuny.edu/~chemwksp/index.html

| *Name:* **Program Evaluation** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| Among the leading professional associations in the field are the American Educational Research Assoc., American Evaluation Assoc., American Statistical Assoc., and the Assoc. for Institutional Research | 6 | 2 | 4 | 5 |

*Description:* A national study found that academic intervention programs that conducted regular program evaluation studies reported higher academic outcomes for students. Such evaluation studies provided an environment for higher accountability, program innovation, regular feedback regarding program efficacy, and encouraged improvement in services to students.

*For More Information:* Boylan, H. R. (2002). What works: Research-based best practices in developmental education. Boone, NC: Appalachian State University; http://aera.net/; http://www.eval.org/; http://www.amstat.org; http://airweb.org/; http://www.wmich.edu/evalctr/index.html; http://www.uncc.edu/stuaffairs/sarlinks.htm

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| *Name:* **Study Skills Course** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| The leading professional association for this area include the College Reading and Learning Association, National Association for Developmental Education, and the National College Learning Center Association | 2 | 1 | 4 | 5 |

*Description:* A subset of developmental education courses (*described elsewhere in this document*), study skill courses focus on the acquisition and practice of learning strategies needed to learn academic content material at the college level.

*For More Information:* http://learningtolearn.com/; http://crla.net; http://nade.net

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| *Name:* **Structured Learning Assistance** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| Developed at Ferris State University (MI). Other institutions have received training to implement SLA. SLA is currently supported by a FIPSE grant. | 7 | 5 | 2, 4 | 3, 5 |

*Description:* The Structured Learning Assistance (SLA) Program offers all students the opportunity to improve their study and learning skills in specific courses and encourages collaborative learning. SLA targets courses, not any specific student population. There is no fee for this program. The program provides four hours of guided study workshops each week which are in addition to regular class sessions. Enrollment in SLA courses is voluntary; however, once enrolled, if a student's grade falls below a 2.0, attendance at workshops is mandatory until the cumulate grade point improves to a minimum of 2.0. All students are required to attend the first two workshops. The professor's first quiz or test determines if continued attendance is required or voluntary. The workshop facilitator provides specific background information related to the course and assists students in making connections to class lectures. Workshops stress learning the course content and developing effective study methods. The program also serves as a mechanism for giving professors regular feedback on their teaching. This feedback is provided by the facilitator who manages the workshop and who attends each class session. This feedback allows the professor to make adjustments or re-emphasize information that students are struggling with.

*For More Information:* http://www.ferris.edu/htmls/academics/sla/

| *Name:* **Supplemental Instruction** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| Developed at the University of Missouri-Kansas City in 1973. Faculty and staff from more than 1,000 colleges in numerous countries world-wide have been trained to implement SI on their home campus. | 7 | 5 | 2, 4 | 3, 5 |

*Description:* SI is a student academic assistance program that increases academic performance and retention through its use of cognitive and collaborative learning strategies. The SI program targets traditionally difficulty academic courses, those that typically have 30 percent or higher rate of D or F final course grades and/or withdrawals, and provides regularly scheduled, out-of-class, peer-facilitated sessions that offer students an opportunity to discuss and process course information. Sessions are facilitated by a SI leader, a student who has already taken the target class and earned a high grade. SI leaders facilitate the out-of-class SI sessions and guide the students to discover and master the material. Students develop skills both in "what to learn" as well as "how to learn it." Study strategy practice is embedded in review of the course material. SI was the first program validated as an Exemplary Educational Program by the U.S. Department of Education for improving college student academic achievement and persistence rates. Research also suggests personal and professional development opportunities for faculty members and SI leaders.

*For More Information:* http://www.umkc.edu/cad/si/ National Center for SI, 5100 Rockhill Road, SASS #210, Kansas City, MO 64110; 816-235-1174

| *Name:* **Targeted Populations** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| The leading professional association for the this field concerned with first-generation and disadvantaged students is the Council on Opportunity in Education. | 9 | 5 | 2, 4 | 3, 6 |

*Description:* Academic intervention and enrichment programs need to be customized to meet specific needs of first-generation college, economically-disadvantaged, and students with a disability. Research concerning socio-cultural theories of learning suggest that attention to the unique needs of students will require more customization of academic intervention models.

*For More Information:* http://www.trioprograms.org/;

| *Name:* **Tenure and Promotion Policy Change** | *Admin. Support* | *Faculty Support* | *Staff Skill* | *Cost Factor* |
|---|---|---|---|---|
| | 9 | 3 | n.a. | 1 |

*Description:* Faculty members are more likely to make behavioral changes regarding teaching and learning activities when the campus culture and value system supports these actions and rewards them in a tangible manner. This supportive environment is demonstrated by significant changes in faculty tenure and promotion policies to assign increased importance to student teaching evaluations, student advisor evaluations, review of teaching/learning portfolio materials, alternative venues for tenure attainment through a teaching/learning portfolio, and other activities that impact student retention.

*More Information:* Seldin, P.; & Assoc. (1990). How administrators can improve teaching: Moving from talk to action in higher education. San Francisco: Jossey-Bass.

| Name: Tutoring<br>There are several professional associations in this area including the College Reading and Learning Association, National Association for Developmental Education, and National Tutoring Association. | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 3 | 2 | 2, 4 | 2, 5 |

Description: The oldest form of academic support, it is defined as one-to-one or small-group instruction that explains, clarifies, and exemplifies a topic and ultimately, promotes independent learning. National studies suggest that extensive training, supervision of tutors, regular program evaluation increases the tutor program effectiveness with improving final course grades of student participants.

For More Information: http://ntatutor.org/; http://www.crla.net/tutorcert.htm; http://libweb.sfasu.edu/nadecb/index.html; http://crla.net; http://nade.net

| Name: Video-Based Supplemental Instruction<br>Developed at the University of Missouri-Kansas City in 1990. Faculty and staff from more than 100 colleges in 5 countries have been trained to implement VSI on their home campus. | Admin. Support | Faculty Support | Staff Skill | Cost Factor |
|---|---|---|---|---|
| | 7 | 2 | 3, 4 | 4, 5 |

Description: VSI is a course delivery system that allows students to concurrently develop content mastery of academically difficult subjects while developing the necessary learning skills needed for mastery in this and other courses. Distance learning versions of first year courses are placed on video tape and students are enrolled in cohorts to watch the video lectures with frequent stops for discussion, practice of learning strategies on the content material. A trained facilitator guides the enrolled students as they process the lecture material and develop new learning strategies.

For More Information: http://www.umkc.edu/cad/si/ National Center for SI, 5100 Rockhill Road, SASS #210, Kansas City, MO 64110; 816-235-1174

# College Student Achievement and Persistence
# Resources for Professional Development

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## Associations and Organizations (Profit & Nonprofit):

**American Association of Collegiate Registrars and Admissions Officers** www.aacrao.org/ One Dupont Circle, NW, Suite 520, Washington D.C. 20036, (202) 263-0288. The mission of AACRAO is to provide professional development, guidelines and voluntary standards to be used by higher education officials regarding the best practices in records management, admissions, enrollment management, administrative information technology and student services. AACRAO publishes numerous publications on strategic enrollment management and often features practical approaches to enrollment management at the annual conference and through its publications.

**American Counseling Association**, www.counseling.org/, 5999 Stevenson Ave., Alexandria, VA 22304, (800) 347-6647. ACA is a professional and educational organization dedicated to the enhancement of the counseling profession. ACA provides leadership training, publications, continuing education opportunities, and advocacy services. ACA has been instrumental in setting professional and ethical standards for the counseling profession. The association has made strides in accreditation, licensure, and national certification.

**Collegeways**, www.cscsr.com Collegeways provides retention resources to individuals and educational institutions such as a journal, listserv, and on-line retention bibliography. The aim of the web site is to provide researchers and practitioners with a comprehensive resource for information on student retention.

**Consortium for Student Retention Data Exchange** tel.occe.ou.edu/csrde/ 1700 Asp Ave. Norman, OK 73072; (405) 325-2158. Since 1994, the Consortium has coordinated the data-sharing activities of a diverse group nearly 500 4-year and 2-year degree-granting institutions representing every level of Carnegie classification from Doctoral through Baccalaureate, public and private, large and small institutions. Through cooperative data-exchange efforts of the members, CSRDE collects and analyzes student retention and graduation data not available through public sources such as IPEDS.

**Council for the Advancement of Standards**, www.cas.edu One Dupont Circle, NW, Suite 300, Washington, DC 20036-1188, (202) 862-1400. CAS has been the pre-eminent force for promoting standards in student affairs, student services, and student development programs. CAS continues to create Standards and Guidelines and Self - Assessment Guides for 29 functional areas, consistent with institutional missions.

**Educational Policy Institute**, www.educationalpolicy.org The EPI is a non-profit organization dedicated to policy-based research on educational opportunity for all students. In addition to policy reports, several manuals on student retention can be downloaded from the web site.

**Learning Support Centers in Higher Education** www.pvc.maricopa.edu/~lsche/ Through this web portal a person can review the history of learning support centers in higher education along with relevant information concerning its impact upon student persistence. Resources include: full-text articles based on best practices in learning assistance, updated calendar of conferences that may be useful for learning support center directors and staff along with an extensive bibliography, related book and periodical reviews, professional development courses and degrees, links to professional association web sites and listservs.

**National Academic Advising Association**, www.nacada.ksu.edu/index.htm, Kansas State University, 2323 Anderson Ave, Suite 225, Manhattan, KS 66502-2912; (785) 532-5717. This web site provides publications, articles, and bibliographies related to student retention and the role of

academic advising in particular with increasing student success and persistence. Their regional and national conferences often features presentation related to student retention issues.

**National Orientation Directors Association**, www.nodaweb.org/,, NODA Home Office, University of Michigan - Flint, 375 University Center, Flint, MI 48502-1950, (810) 424-5513. NODA serves orientation, retention and transition professionals. National and regional networks address special interests such as the adult learner, two-year and small colleges, Canadian colleges, multi-ethnic affairs, GLBT issues and parent services. NODA publishes a number of publications related to student transition and persistence and hosts conferences.

**National Resource Center for The First-Year Experience and Students in Transition**, www.sc.edu/fye/; Columbia, SC 29208; (803) 777-5281 or 777-6029. The Center provides bibliographies, listservs, research studies, curriculum, publications, teleconferences, national conferences, and other resources related to student persistence.

**Noel-Levitz Centers**, www.noellevitz.com/ 5161 E. Arapahoe Road, Suite 100, Littleton, CO 80122, (800) 628-7216. While the primary purpose of Noel-Levitz is to provide fee-based consulting and student assessment services concerning recruitment and student retention, their web site provides free reports concerning student retention. It also provides a directory and short description of the annual award winners of the student retention awards since 1989. Their annual conference showcases enrollment management programs in the U.S..

**Pathways to College**. www.pathwaystocollege.net This is a national alliance of organizations committed to using research-based knowledge to improve postsecondary education access. A variety of reports are available to download including bibliographies and student success program directories..

**Policy Center on the First Year of College**; www.firstyear.org  Brevard College, 400 N. Broad St., Duplex #1, Brevard, NC 28712, (828) 966-5401. The Policy Center mission is to improve of the first college year through enhanced learning outcomes and the success of first-year students. A focus of the Center is development and dissemination of a range of first-year

assessment procedures and tools that strengthen or confirm practices in the curriculum, the co-curriculum, and institutional policy. In addition, this process will contribute to research on best practices in first-year programs. The Center is an extension of the work of John N. Gardner and his colleagues at the University of South Carolina's National Resource Center for the First-Year Experience and Students in Transition. The two entities work cooperatively on issues for success of students.

## Publications (Student Retention Periodicals):

**Journal of College Student Retention: Research, Theory & Practice** (Dr. Alan Seidman, Editor). www. baywood.com Baywood Publishing Company, 26 Austin Avenue, Box 337, Amityville, NY 11701; (631) 691-1270. Purposes of the journal: include: current and future retention theory and practice; current research studies pertaining to retention, attrition theory, and practice; identification of retention problems; description of retention programs and services; application of current theory and practice to national and local problems; and application of retention theory and practice to non-traditional students.

**Recruitment & Retention in Higher Education Newsletter**. Magna Publications, www.maganapubs. com/ 2718 Dryden Dr., Madison, WI 53704; (608) 246-3590. The newsletter helps administrators attract students to campus and provide the services they need to succeed. Covers programs on topics such as minority recruitment, advising, technology, special curriculum, remedial and academic programs, student retention, and non-traditional student services. This publication is geared to assist everyone who affects student recruitment and retention -admissions counselors, enrollment managers, academic chairs and deans, and orientation personnel.

## Publications Related to Student Retention:

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## Student Retention Bibliographies:

*Perspectives in postsecondary education programs and student support interventions* bibliography, Pathways to College Network, http://www.pathwaystocollege.net

*Student retention bibliography*. Collegeways, http://www.cscsr.com

*Annotated bibliography of postsecondary peer cooperative learning programs*, David Arendale, http://www.tc.umn.edu/~arend011/Peerbib03.pdf