

The Power of a College Degree: The Economic and Personal Benefits of a College Education

Approximately 31% of Americans hold a 4-year college degree (Lumina Foundation, 2015). When they are compared with people from similar social and economic backgrounds who did not continue their education beyond high school, research reveals that a college education is well worth it—both in terms of both personal development and career advancement.

Summarized below are positive outcomes associated with a college education and a college degree. Their wide-ranging impact on the whole person and society at large serve as testimony to the power of the college experience.

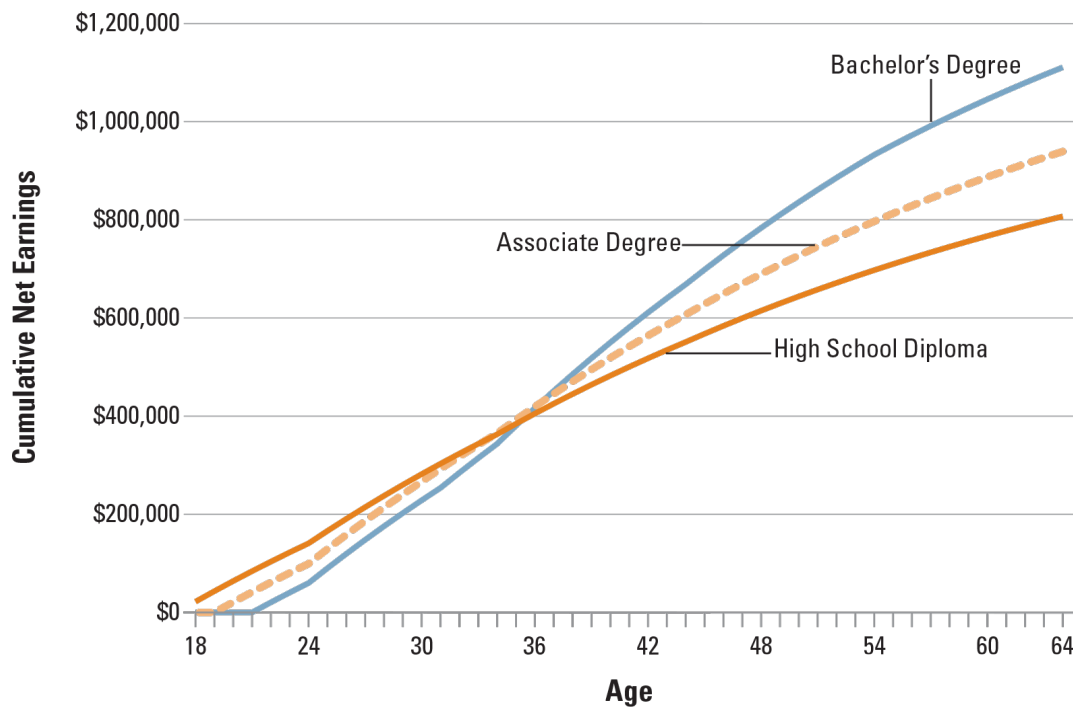
1. Economic & Career Benefits

- Job Security and Stability—college graduates have lower rates of unemployment and lower risk of being laid off work
- Higher Income—the gap between the earnings of high school and college graduates is large and *growing*. Individuals holding a bachelor's degree earn an average weekly salary that's \$17,500 higher than high school graduates. When these differences are calculated over a lifetime, the income of families headed by people with a bachelor's degree earn an income that's over a million dollars more than families headed by people with a high school diploma. (See Figure I.1)

"It's an irrefutable fact that college gives you a significant and persistent advantage decade after decade."—Mary C. Daly, Vice President of the Federal Reserve Bank of San Francisco (quoted in the *Los Angeles Times*, April 15, 2015)

- Better Retirement and Pension Benefits
- Career Versatility and Mobility—greater ability to move out of one position into another (a college graduate has more job options)
- Career Advancement—greater opportunity to move up to higher-level professional positions (a college graduate has more opportunities for job promotions)
- Career Satisfaction—college graduates are more likely to be in careers that interest them and in positions they find stimulating, challenging, and personally fulfilling
- Career Autonomy—college graduates have more opportunities to work independently (without supervision) and make their own on-the-job decisions
- Career Prestige—college graduates are more likely to hold higher-status positions, (i.e., jobs considered to be desirable and highly regarded by society).

Figure I.1



“On average, the benefits of a four-year degree are equivalent to an investment that returns 15.2% per year. This is more than double the average return to stock market investments and more than five times the returns to corporate bonds, gold, long-term government bonds, or home ownership.”

—Baum, Ma, & Payea, *How College Shapes Lives*

2. Advanced Intellectual Skills

College graduates possess:

- Greater knowledge
- More effective problem-solving skills—better ability to deal with complex and ambiguous (uncertain) problems
- Greater openness to new ideas
- More advanced levels of moral reasoning
- More effective consumer choices and decisions
- Wiser long-term investments
- Clearer sense of self-identity—greater awareness and knowledge of personal talents, interests, values, and needs
- Greater likelihood of learning continually throughout life

“Without exception, the observed changes [during college] involve greater breadth, expansion, and appreciation for the new and different . . . and the evidence for their presence is compelling.”

—Ernest Pascarella and Pat Terenzini, *How College Affects Students*

3. Physical Health Benefits

- Better health insurance—college graduates are more likely to have insurance coverage and have more comprehensive coverage
- Better dietary habits
- Exercise more regularly
- Have lower rates of obesity
- Live longer and healthier lives

4. Social Benefits

- Greater social self-confidence
- Better ability to understand and communicate effectively with others
- Greater popularity
- More effective leadership skills
- Higher levels of marital satisfaction

5. Emotional Benefits

- Lower levels of anxiety
- Higher levels of self-esteem
- Greater sense of self-efficacy—college graduates believe they have more influence or control over the outcomes of their lives
- Higher levels of psychological well-being
- Higher levels of life satisfaction and happiness

6. Effective Citizenship

- Greater interest in national issues—both social and political
- Greater knowledge of current events
- Higher voting participation rates
- Higher rates of participation in civic affairs and community service

“The evidence is overwhelming that higher education improves people’s lives, makes our economy more efficient, and contributes to a more equitable society.”

—The College Board

7. Higher Quality of Life for Their Children

- Less likely to smoke during pregnancy
- Provide better health care for their children
- Spend more time with their children
- More likely to involve their children in stimulating educational activities that advance their cognitive (mental) development
- More likely to save money for their children to go to college
- More likely to have children who graduate from college
- More likely that their children attain higher-status, higher-salary careers

“My three-month-old boy is very important to me, and it is important I graduate from college so my son, as well as I, live a better life”

—First-year student's response to the question: "What is most important to you?"

Sources: Andres & Wyn (2010); Astin (1993); Bowen (1977, 1997); Baum, Ma,, & Payea (2013); Dee (2004); Carnevale, Strohl, & Melton (2011); Feldman & Newcomb (1994); Hamilton (2011, 2014); Knox, Lindsay, & Kolb (1993); Lumina Foundation (2013, 2015); Pascarella & Terenzini (2005); Pew Research Center (2014); Seifert, et al. (2008); SHEEO (2012); The College Board (2013); The Hamilton Project (2014).; Tomasho (2009); U.S. Bureau of Labor Statistics (2015)

“For the individual, having access to and successfully graduating from an institution of higher education has proved to be the path to a better job, to better health and to a better life.”

—College Board

The following material has been excerpted from the following source: Cuseo, J., Thompson, A., & Campagna, M. (2016). *Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development* (4th ed.). Dubuque, IA: Kendall Hunt.

Developing a Long-Range Graduation Plan for Course Work & Co-Curricular Experiences

This exercise is designed to help you design a detailed yet flexible, four-year academic plan. While it may seem a bit overwhelming to develop a long-range plan at this stage of your college experience, you will receive guidance from your course instructor and academic advisor. This is an opportunity to begin customizing your college experience and mapping your educational future. Remember: an educational plan isn't something set in stone; it can change depending on changes in your academic and career interests. As you create, shape, and follow your plan, consult frequently with your academic advisor.

Overview of Courses Comprising Your Plan

Your trip through the college curriculum will involve taking courses in the following three key categories:

1. *General education* courses required of all college graduates regardless of their major
2. *Required* courses in your chosen *major*
3. *Elective* courses you choose to take from any listed in your college catalog.

What follows are planning directions for each of these types of courses. By building these three sets of courses into your educational plan, you can create a road map to guide your future course work. Once you've reserved slots for the three key categories of courses you will have a blueprint to direct (not dictate) your educational future. If you later change your mind about a particular course you originally planned to take, you can do so without interfering with your educational progress by substituting another course from the same category. For instance, if your original plan was to take psychology to fulfill a general education requirement in the Social and Behavioral Sciences, but you decide later to take anthropology instead, you have a space reserved in your plan to make the switch.

As you gain more educational experience, your specific academic and career interests are likely to change and so may the specifics of your long-range plan. The purpose of this plan is not to tie you up or pin you down, but supply you with a map to help keep you on course and moving in the right direction. Since this is a flexible plan, it's probably best to complete it in pencil or electronically so you can make future changes to it as needed.

Once you've developed your plan, hold onto it, and keep an up-to-date copy of it throughout your time in college. Bring it with you when you meet with advisors and career development

specialists, and come prepared to discuss your progress on the plan as well as any changes you'd like to make to your plan.

Part A. Planning for General Education

Step 1. Use your course catalog (bulletin) to identify the general education requirements for graduation. You're likely to find these requirements organized into general divisions of knowledge (Humanities, Natural Sciences, etc.). Within each of these divisions, courses will be listed that you can take to fulfill the general education requirement(s) for that particular division. (Course catalogs can sometimes be tricky to navigate or interpret; if you run into any difficulty, seek help from your course instructor or an academic advisor.) You'll probably be able to choose courses from a list of different options. Use your freedom of choice to choose general education courses whose descriptions capture your curiosity and contribute to your personal development and career plans. You can use general education courses not only to fulfill general education requirements, but also to test your interest and talent in different fields—one of which you may end up becoming your major (or minor).

Step 2. Select courses in the catalog that you plan to take to fulfill your general education requirements and list them on the following form. Some courses you're taking this term may be fulfilling general education requirements, so be sure to list them on this planning form.

Planning Grid for *General Education* Courses

Course Title	Units	Course Title	Units
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total Number of Units Required for *General Education* = _____

Part B. Planning for a College Major

The point of this portion of your educational plan is not to force you to commit to a major right now, but to develop a flexible plan that will allow you to reach a well-informed decision about your major. If you have already chosen a major, this exercise will help you lay out exactly what's ahead of you and confirm whether the course work required by your major is what you expected and if it "fits" well with your interests and talents.

Step 1. Go to your college catalog and locate the major you’ve chosen or you are considering. If you’re completely undecided, select a field that you might consider as a possibility. To help you identify possible majors, peruse your catalog or go online and answer the questions at www.mymajors.com

Another way to go about this is to first identify a career you might be interested in and work backwards to find a major that leads to this career. If you would like to use this strategy, the following website will guide you through the process:
<http://uncw.edu/career/WhatCanIDoWithaMajorIn.html>.

Step 2. After you’ve selected a major, consult your college catalog to identify the courses required for that major. Your campus may also have “major planning sheets” that list the specific course requirements for each major. (To see if these major-planning sheets are available, check with the Advising Center or the academic department that offers the major you’ve selected.)

A college major will require all students majoring in that field to complete specific courses. For instance, all business majors are required to take microeconomics. Other courses required for a major may be chosen from a menu or list of options (e.g., “choose any three courses from the following list of six courses”). Such courses are often called “major electives.” For these major electives, read their course descriptions carefully and use your freedom of choice wisely to select courses that interest you and are most relevant to your future plans.

Note: You can “double dip” by taking courses that fulfill a major requirement and a general education at the same time. For instance, if your major is psychology, you may be able to take a course in General or Introductory Psychology that counts simultaneously as a required major course and a required general education course in the area of Social and Behavioral Sciences.

Step 3. Identify courses you plan to take to fulfill your major requirements and electives and list them on the following form. Courses you’re taking this term may be fulfilling requirements in the major you’ve selected, so be sure to list them on this form.

Planning Grid for Courses in Your *Major*

Course Title	Units	Course Title	Units
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total Number of Units Required for Your *Major* = _____

Plan C. Planning Your Free Electives

Now that you've built general education courses and major courses into your educational map, you're well positioned to plan your *free electives*—courses not required for general education or your major but are needed to reach the minimum number of units required for a college degree. These are courses you choose freely from any listed in your college catalog.

To determine how many free-elective units you have, add up the number of course units you're taking to fulfill general education and major requirements, then subtract this number from the total number of units you need to graduate. The number of course units remaining represents your total number of free electives. (For strategies on choosing electives, see the Appendix, p. 14.)

Planning Grid for Your *Free Electives*

Course Title	Units	Course Title	Units
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total Number of *Free Elective* Units = _____

Part D. Putting It Altogether: Developing a Comprehensive Graduation Plan

In the previous three sections, you built three key sets of college courses: general education courses, major courses, and free-elective courses into your plan. Now you're positioned to tie these three sets of courses together and create a comprehensive graduation plan.

Using the “Long-Range Graduation Planning Form” on pp. 7-10, enter the courses you selected to fulfill general education requirements, major requirements, and free electives. In the space provided next to each course, use the following shorthand notations to designate its category:

GE = *general education* course

M = *major* course

E = *elective* course

Notes

1. If there are courses in your plan that fulfill two or more categories at the same time (e.g., a general education requirement and a major requirement), note both categories.
2. To complete a college degree in four years (approximately 120 units), you should plan to complete about 30 course credits each academic year. Keep in mind that you can take college courses in the summer as well as the fall and spring.

Unlike high school, taking summer courses while you're in college doesn't mean you've fallen behind or need to retake a course you failed during the “normal” school year (fall and spring terms). Instead, summer term can be used to get ahead and reduce your time to graduation. Adopt the mindset that summer term is a regular part of the college academic year; use it strategically to keep you on track to complete your degree in a timely fashion.

3. Keep in mind that the number associated with a course indicates the year in the college experience when the course is usually taken. Courses numbered in the 100s (or below) are typically taken in the first year of college, 200-numbered courses in the sophomore year, 300-numbered courses in the junior year, and 400-numbered courses in the senior year.
4. If you haven't decided on a major, a good strategy is to focus on completing general education requirements during your first year of college. This first-year strategy will open more slots in your course schedule during your sophomore year—by that time, you may have a better idea of what you'll to major in, so you can fill these open slots with courses required for the major you've chosen. (This first-year strategy will also allow you to use general education courses in different subjects to test your interest in majoring in one of those subjects.)
5. Be sure to check whether the course you're planning to take has any *prerequisites*—courses that need to be completed *before* you can enroll in that course. For example, before you can enroll in literature course, you may need to complete at least one prerequisite course in writing or English composition.
6. Your campus may have a *degree-audit program* that allows you to electronically track the

courses you've completed and the courses remaining to complete a degree in your chosen major. If such a program is available, take advantage of it.

7. You're not locked into taking all your courses in the exact terms you originally placed them in your plan. You can trade times (terms) if it turns out that the course isn't offered during the term you were planning to take it, or if it's offered at a time that conflicts with another course in your schedule.

8. Keep in mind that not all college courses are offered every term, every year. Typically, college catalogs do not contain information about when courses will be scheduled. If you're unsure when a course will be offered, check with an academic advisor. Some colleges develop *a projected plan of scheduled courses* that shows what academic term(s) courses will be offered for the next few years. If such a projected schedule of courses is available, take advantage of it. It will enable you to develop an educational plan that not only includes *what* courses you will take, but also *when* you will take them.

Graduation-Plan Template

FRESHMAN YEAR

Fall Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = ____

Spring Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = ____

Summer Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
		Total Units = _____

SOPHOMORE YEAR*Fall* Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = _____

Spring Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = _____

Summer Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
		Total Units = _____

JUNIOR YEAR*Fall Term*

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = _____

Spring Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = _____

Summer Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
		Total Units = _____

SENIOR YEAR*Fall Term*

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = _____

Spring Term

Course Title	Course Type General Ed. (GE), Major (M), Elective (E)	Course Units
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
		Total Units = _____

Reflection Questions:

1. What is the total number of credits in your graduation plan? Does it equal or exceed the total number of credits needed to graduate from your college or university?
 2. How many credits will you be taking in the following areas?
 - a) General Education =
 - b) Major =
 - c) Free Electives =
 3. Look over the course required for the major you selected:
 - a) Are there required courses you were surprised to see or didn't expect would be required?
 - b) Are you still interested in majoring in this field?
 - c) How likely is it that you will change the major you selected?
 - d) If you were to change your major, what would "Plan B" likely be?
 4. Did completing this long-range graduation plan help you clarify your educational goals? Why or why not?
-

Developing a Co-Curricular Plan for Learning Experiences Outside the Classroom

Now that you've completed a curricular plan for your course work, let's turn to devising a plan for the second key component of a college education: *experiential* learning—learning from “hands-on” experiences outside the classroom—either on campus (e.g., leadership positions) or off campus (e.g., service experiences, internships, or employment). Learning opportunities available to you beyond the curriculum are known collectively as the *co-curriculum*. Co-curricular experiences complement your course work, enhance the quality of your education, and increase your employability. Keep in mind that co-curricular experiences are also resume-building experiences.

Ideally, by the time you graduate, you should have co-curricular experiences in each of the following areas:

- *Volunteer work or community service* that demonstrates social responsibility and allows you to gain “real world” experience
- *Leadership and mentoring* skills—for example, participating in leadership retreats, student government, peer mentoring, or serving as a student representative on college committees
- *Internships* or work experiences in a field related to your major or career goals
- Interacting and collaborating with members of *diverse racial and cultural groups*—for example, participating in multicultural clubs, organizations, or retreats
- *Study-abroad* or *study-travel* experiences that allow you to acquire international knowledge and a global perspective

Step 1. Consult your *Student Handbook* or check with professionals working in the offices of Student Life (Student Development) and Career Development to locate co-curricular experiences in each of the above areas.

Step 2. Identify one campus program or opportunity in each of these areas that interests you and note it on the planning form below.

Planning Grid for Co-Curricular Experiences

Volunteer Work/Community Service: _____

Leadership/Mentoring: _____

Diversity (Multicultural) Experience: _____

Study-Abroad (International) Experience: _____

Internship or Work Experience Relating to Your Major or Career Goals: _____

Notes:

* Summer term is an excellent time of the year to build experiential learning into your educational plan without having to worry about conflicts with your scheduled classes or trying to do it while simultaneously handling all the academic work associated with a full load of courses.

* Keep track of the specific skills you develop while engaging in co-curricular experiences, and be sure to showcase them to future employers. Don't just accumulate extracurricular activities to list on your resume, reflect on your experiences and articulate what you *learned* from them. Identify the thinking processes you used, as well as the transferable skills and personal qualities you developed while engaging in these experiences.

* Keep in mind that the professionals with whom you interact while participating in co-curricular experiences can serve as valuable references and sources of letters of recommendation to future employers, graduate schools, and professional schools.

Reflection Questions:

1. What *challenges or obstacles* do you think might interfere with your ability to complete your educational plan (finances, family responsibilities, etc.)?
2. What campus *resources* might help you deal with these challenges or obstacles?
3. What people (on or off campus) could you *network* with to help you successfully complete your plan?
4. As you pursue your educational plan, who might be a *mentor* for you, or serve as a personal source of *inspiration and motivation*?

Final Reminder: Hold onto your curricular and co-curricular plans. Keep an up-to-date copy of them throughout your years in college. Bring these plans with you when you meet with your academic advisor and career development specialists, and come prepared to discuss your progress on these plans as well as any changes in your plans.

STRATEGIES FOR LEARNING & REMEMBERING STUDENTS' NAMES

The importance of remembering a person's name is poignantly articulated by Dale Carnegie in his classic book, *How to Win Friends and Influence People*: "We should be aware of the *magic* contained in a name and realize that this single item is wholly and completely owned by the person with whom we are dealing and nobody else. Remember that a person's name is to that person the sweetest and most important sound in any language" (1936, p. 83). Learning the names of your students as quickly as possible is an effective way to establish early instructor-student rapport and to lay the foundation for a classroom environment in which students feel comfortable interacting with their instructor and becoming actively involved in class. Listed below is a "top ten" list of strategies for the effective and expeditious learning of student names.

1. Review and practice the names of students on your *course roster before the first day of class*. Learning to associate or pair faces and names is expedited if the names are learned prior to learning the faces that are paired (associated) with the names.
2. Ask the office of Students Services or Institutional Technology if you could review *identification photos* of students in your class. This could be done before the course begins, or whenever class rosters are first available from the Registrar. You can use student-identification photos selectively to review only the names and faces of particular students who you're having trouble remembering.
3. Make *shorthand comments* next to student names *when calling roll on the first day of class*. (For example, record memory-triggering comments referring to the student's distinctive physical characteristics or seating location.) Remaining after class for a few minutes to review the comments you made by each student's name is an effective memory-enhancement practice because it capitalizes on short-term visual memory, which can allow you to still recall students' facial features and for the spatial (seating) position they occupied in class. Your visual-spatial memory can be improved further if you request some information from students on the first day (e.g., personal information sheet) and collect their responses *in the same order in which they are seating* in class. Moreover, this quick post-class review tends to combat the "forgetting curve" at a time when most memory loss tends to occur—during the first 20-30 minutes after new information has been processed.
3. Take a *photograph* of the class and have students sign their names by (or on) their respective faces. Use this as a record to review or rehearse student names until you have mastered them without having to resort to the photos.
4. Ask students introduce themselves, and have this class session *videotaped* so that you can review or rehearse students' names and faces outside of class time.
5. Ask students if they would be willing to send you a "selfie" or share with you a *photocopy* of the picture on their student identification card and use these pictures to help you associate names with faces.
6. Use short *icebreaker* activities to help you learn student names and to help students learn the names of their classmates. For example, "paired interviews" may be used in which two students interview each other and then report the other's autobiographical information to the whole class. Another effective icebreaker is the "name game" strategy whereby students sit in a circle or horseshoe arrangement and say their name preceded by an adjective that begins with the first letter of their name and describes something about their personality (e.g., "jittery Joe" or "gregarious Gertrude"). In this game, students may say their names and also accompany it by some nonverbal behavior that reflects their personality. After each student's self-introduction, ask the next student to recall the name of the previous student before giving his or her own name.
7. *Rehearse* student names during periods of "dead time" (e.g., as students enter class and take their seats, or as you circulate among students during small-group discussions and exams). During the first week or two of class, come to class early and remain after class while students file out. This will provide you with opportunities to rehearse names, one by one, as students enter and leave the classroom.
8. During the first weeks of the term, frequently assign short *reaction papers* or *minute papers* at the end of class. This practice will enable you to learn the names of students as they come up (one by one) to turn in their papers at the end of class, and at the start of the following class session when they come up to the front of class to pick-up their papers.
9. During the first few weeks of class, schedule *brief, out-of-class conferences* with students so you can meet them and learn their names one at a time. This strategy enhance your ability to learn and remember your students' names because it allows for "distributed" practice, i.e., learning small amounts of information in a series of short separate sessions. For instance, it is easier to associate 21 faces with 21 names if they are learned three per day on seven different days, rather than learning all 21 of them in one day.
10. *Continually refer to students by name* after initially learning their names.
For example, always address them by name when you respond to them in class or when you see them on campus. This practice serves not only to reinforce your memory of each student's name, it also repeatedly signals to students that you know them as individuals and are responding to each of them as unique persons. Even better than just knowing students' names is showing them that you know their names by referring to them by name when you interact with them.

THE ONE-MINUTE PAPER

An Efficient & Effective Strategy for Promoting Student Reflection

Joe Cuseo

Introduction

The “one-minute paper” may be defined as a short, anonymous, in-class writing activity (taking one-minute or less to complete), whereby students respond anonymously to an instructor-posed question designed to provide feedback about student learning. The practice was originally developed by a physics professor at the University of California, Berkeley (cited in Davis, Wood, & Wilson, 1983), then popularized by Cross and Angelo (1988) and Cross and Angelo (1993) as one of a wide variety of quick “classroom assessment techniques” (CATs). For example, students may write a one-minute paper in response to such questions as, “What was the most important concept you learned in class today? Or, “What was the ‘muddiest’ or most confusing concept covered in today’s class?” Subsequently, one-minute papers have been referred to as a type of “quick think” (Johnston & Cooper, 1997) or “quick write.” (Kingore, 2003).

Although the one-minute paper was originally developed to assess student learning at the end of a day’s lesson, I have found it to be a very versatile strategy that may be adapted for other purposes, and used in different contexts and at times other than the end of a class. For instance, in addition to being used to provide instructor-centered feedback about whether students have understood or are confused by a concept covered in class, one-minute papers may be used as a learner-centered strategy to help students reflect on and discover personal meaning in learning experiences that take place inside or outside the classroom (e.g., academic advising, tutoring, or residential programming event).

In addition to being completed at the end of class or a learning experience, one-minute papers may be used *before* a presentation—to activate students' prior knowledge, feelings, and/or misconceptions about the concepts to be presented, as well as *during* a presentation—to “break up” (punctuate) the presentation and attenuate attention loss that normally take place when students sit and process information for an extended period of time. If students complete a one-minute paper at each of these three junctures, an effective learning sequence could be intentionally created with a meaningful *beginning*, *middle* and *end*—in the following fashion:

- (1) A one-minute paper *prior* to the learning experience—as a “warm up” to activate students' pre-existing ideas about the topic (e.g., What do you already know, or think you know, about this topic?);
- (2) A one-minute paper *during* the learning experience—to “break up” long periods of information processing and intercept “attention drift” (loss); and
- (3) A one-minute paper *after* learning—as a “wrap up” to facilitate closure and promote consolidation (transfer of learning from short-term to long-term memory).

Furthermore, using one-minute papers as bookends at the start and end of a learning experience, may allow for pre/post assessment of student gains in knowledge (or changes in attitudes) that take place as a result of the learning experience. One-minute can be used to assess (a) cognitive change (e.g., “What do you know now that you know now that you didn’t before?”), (b) attitudinal change (e.g., “How do you feel about this issue now compared to how

you felt before?”), or behavioral change (e.g., “Will you make any changes in your habits or behaviors as a result of what you learned today?”).

One-minute papers may provide distinctive “course-embedded assessment” data because students are assessing a *specific* learning experience *immediately* after experiencing it; thus, their memory for the experience is likely to be vivid and its details, as well as its impact, accurately recalled. In contrast, standard end-of-course or end-of-term assessment surveys require students to recall a collection of learning experiences, some of which date back to the beginning of the term and may not be clearly recalled or accurately reconstructed from long-term memory.

A more detailed synthesis of the multiple purposes and benefits of one-minute papers is provided on pp. 5-9. Listed below is a variety of questions that may be used as one-minute paper prompts; they are organized into categories based on the particular learning process they’re designed to promote or the type of learning outcome they’re designed to achieve. (To use these questions for out-of-class learning experiences, the term “event” or “program” could be substituted for the word “class.”)

Questions that May be Used as Minute-Paper Prompts

Student Comprehension

- * What did you perceive to be the major *purpose or objective* of today’s class?
- * What do you think was the most *important* point or *central* concept communicated during today’s presentation?
- * What *helped/hindered* your understanding or appreciation of today’s topic?
- * Do you have unanswered questions in your mind about what was covered in today’s class?

Conceptual Connections (Integration)

- * Did you see any *relationships* between today’s topic and other topics previously covered in this *course*?
- * Was there anything discussed in class today that *connected or related to* something you’re learning or have learned in *another course*?

Perceived Relevance

- * What *example or illustration* cited in today’s class could you *relate to your life*?
- * In your opinion, what was the *most useful* idea discussed in today’s class?
- * During today’s class, were there any idea that struck you as something you could or should *put into practice*?

Student Interest

- * What was the most *surprising or unexpected* idea you heard in today’s discussion?
- * Without looking at your notes, what *stands out* in your mind about today’s class?
- * Looking back at your notes, what would you say was the most *stimulating or useful* idea discussed in class today?
- * What was the most powerful *example or image* you experienced in today’s class.
- * For you, what interesting *questions remain unanswered* about today’s topic?
- * What *more* (if anything) would you like to learn or know about this topic?

Attitudes/Opinions

- * Would you agree or disagree with the following statement made in today’s class . . . ? (Why?)
- * What was the most *persuasive or convincing argument* (or counterargument) expressed in today’s discussion?
- * Was there a position taken in today’s class that you strongly *disagreed* with, or found to be somewhat *disturbing or unsettling*?
- * Were there any ideas expressed in today’s class that caused you to *reconsider or change* your previous opinions, beliefs, or viewpoints?

Question Prompts for Triggering Different Forms of Higher-Level (Higher-Order) Thinking

Research demonstrates that students can effectively learn to apply higher-level question stems, such as those listed below, to ask and answer higher-level thinking questions on different topics and concepts (King, 1990). Furthermore, when students are instructed to use these questions, they proceed to apply them on their own in subsequent group discussions and on course exams (King, 1995, 2002).

1. ANALYSIS (ANALYTICAL THINKING)—breaking down information into its essential elements or parts.

Questions Stems:

- * What are the main ideas contained in _____?
- * What are the important aspects of _____?
- * What are the key issues raised by _____?
- * What are the major purposes of _____?
- * What hidden assumptions or values are embedded in _____?
- * What are the reasons behind _____?
- * What are the underlying causes of _____?
- * How are the ideas contained in _____ similar to or different than _____?
- * What additional information or resources are needed to _____?

2. SYNTHESIS—integrating separate pieces of information to form a more complete and coherent product or pattern.

Questions Stems:

- * In what way is this idea related to _____?
- * How can this idea be joined or connected with _____ to create a more complete or comprehensive answer?
- * How could these different _____ be grouped together into a more general class or category?
- * How could these separate _____ be reorganized or rearranged to produce a comprehensive understanding the big picture?

3. APPLICATION (APPLIED THINKING)—using knowledge for practical purposes to solve problems and resolve issues.

Questions Stems:

- * How can this idea be used to _____?
- * How can this theory or principle be put into practice to _____?
- * What could be done with this idea to improve or strengthen _____?
- * What could be done with this idea to prevent or reduce _____?

4. BALANCED THINKING—carefully considering reasons for and against a particular position or viewpoint.

Question Stems:

- * What are the strengths (advantages) and weaknesses (disadvantages) of _____?
- * What evidence supports and contradicts _____?
- * What are arguments for and counterarguments against _____?
- * What are the major costs and benefits of _____?
- * What are the potential risks and rewards of _____?

5. MULTIDIMENSIONAL THINKING—thinking that involves viewing yourself and the world around you from multiple angles or vantage points.

Question Stems:

- * What are the various factors that could influence or be influenced by _____?

- * How would _____ affect different dimensions of a person's development (emotional, physical, etc.)?
- * What broader impact would _____ have on the social and physical world around me?
- * How might people living in different times (e.g., past and future) be affected by _____?
- * How would people from different cultural backgrounds interpret or react to _____?

6. CRITICAL THINKING (Evaluation)—making critical judgments or assessments.

Question Stems for Evaluating *Empirical Evidence*:

- * What examples support the argument that _____?
- * What research evidence is there for _____?
- * What statistical data document or back up this _____?

Question Stems for Evaluating *Logical Consistency*:

- * If _____ is true, what would follow that's also true?
- * If people believe in _____, what actions or practices should they engage in?
- * What assumptions are being made to reach the conclusion that _____?

Question Stems for Evaluating *Morality (Ethics)*:

- * Is _____ fair?
- * Is _____ just?
- * Is this action consistent with the professed or stated values of _____?

Question Stems for Evaluating *Beauty (Aesthetics)*:

- * Does _____ meet established criteria for judging artistic beauty?
- * What is the aesthetic merit or value of _____?
- * Does _____ contribute to or detract from the beauty of the environment?

Question Stems for Evaluating *Practicality (Usefulness)*:

- * Will _____ work?
- * What practical value does this _____ have?
- * What potential benefits and drawbacks would result if this _____ were put into practice?

Question Stems for Evaluating *Priority (Order of Importance or Effectiveness)*:

- * Which one of these _____ is the most important?
- * Is this _____ the best option or choice available?
- * How would you rank these _____ from first to last (best to worst) in terms of their effectiveness?

7. CREATIVE THINKING—generating ideas that are unique, original, or distinctively different.

Question Stems:

- * What could be invented to _____?
- * Imagine what would happen if _____?
- * What might be a different way to _____?
- * What changes could be made to improve the quality of _____?
- * What would be an innovative approach to _____?
- * What are some untried strategies for solving the problem of _____?

Note:

To get in the habit of stepping back and reflecting on their thinking, students could be encouraged to identify what type of thinking they are engaging in (analysis, synthesis, application, etc.) and record their personal reflections in writing. Students could even keep a “thinking log” or “thinking journal” to increase self-awareness of the thinking strategies they develop over time, or how their thinking strategies may vary across different courses and fields of

study. This strategy will not only help students acquire higher-level thinking skills; it will also help them articulate these skills they have acquired during job interviews and in letters of application for career positions or graduate schools.

Purposes & Benefits of the “One-Minute Paper”

The one-minute paper is a very efficient and versatile educational tool, whose benefits traverse cognitive, affective, and social dimensions of the learning process. Described below are twelve major advantages of the one-minute paper.

1. One-minute papers can be used to help us pause and identify the *most important or significant* educational outcome we are intending to achieve.

One-minute papers have encouraged me to think more carefully about how to *prioritize* course content and to identify “*core*” *concepts* that I want students to reflect on deeply via one-minute papers. For any given class session, I’ve gotten in the habit of asking myself: “What is the most important idea or message I want students to take away from this experience?” My answer to that self-imposed question influences the questions I ask students to answer in their one-minute papers. Predictably, numerous studies show that students are more likely to retain concepts they are asked a question about during a lecture than concepts they simply have presented to them during a lecture (Karpicke & Roediger, 2006, 2008; Ruhl, Hughes, & Schloss, 1987; Szpunar, Khan, & Schacter, 2013). Thus, reserving a bit of class time for students to pause and answer a question related to the most critical concept being covered in class is an effective way to promote student retention of that concept.

2. Student responses on one-minute paper answers can provide us with additional ideas for explaining and illustrating educational concepts.

When I use a one-minute paper to ask students if they have ever experienced or witnessed an example of a key concept presented in class, their responses sometimes provide me with outstanding material that I can use in the future; I build it into my class notes and use it the next time I teach that concept. If I use any of these student-generated examples in my presentation, I mention to the class that they were provided by former students. Acknowledging that the example is a student example almost always seems to heighten class interest; it also demonstrates to students that I really listen to and value their ideas.

3. One-minute papers can provide a “*conceptual bridge*” between successive class periods.

At the beginning of class, when student receive their one-minute papers from the previous class, it reminds them of what we covered last time and helps connect it to what we will be covering in the upcoming class session.

3. One-minute papers can improve the quality of *class discussions* by having students write briefly about a concept or issue to be discussed—*before* they begin discussing it.

This practice can create anticipatory interest in and awareness of a topic's relevance before opening it up for discussion (e.g., "Take a moment to write down why you think this topic is relevant or important to discuss?") Asking students to complete a one-minute paper before engaging in discussion also encourages and reinforces reflective thinking; it supplies students with some quiet time to gather their thoughts prior to verbalizing them—i.e., to think before they speak. This preparatory time may be particularly beneficial for: (a) introverted students who are likely to prefer engaging in introspection before interaction, (b) international students whose primary spoken language isn't English, (c) students who have a fear of public speaking, and (d) students who experience "classroom communication apprehension" (fear of speaking in the classroom context). For these students, the one-minute paper can provide a scaffold to build on (or script to fall back on) and reduce their anxiety about communicating orally.

To ensure equal opportunity for participation after a class discussion has ended, students can complete a one-minute paper in response to the following question: "During our discussion today, what thoughts came to your mind that you did not get the opportunity to share verbally?" (At the start of the next class period, the instructor could anonymously share a comment by written by students who was reticent to speak up during the discussion, showing the student that her idea was worth hearing, which in turn, may reduce some of her reticence about expressing her ideas orally during future class discussions.)

4. One-minute papers are an effective way of engaging *all* students *equally* and *simultaneously*.

When students are responding with a one minute-paper, each student has equal opportunity to participate at the same time, including those students who may be too bashful or fearful to participate orally. This sends a message that the instructor has *high expectations* of all students by suggesting that they all have something worth to contribute—no matter what their cultural background, personal assertiveness, or level of academic preparedness happens to be.

5. One-minute papers can be used to stimulate and facilitate discussion of *diversity*.

While reading students' minute papers, the instructor can look for thematic or distinguishing patterns in the responses of students of different age, gender, ethnic background, or national citizenship. These group-response patterns may be shared with the whole class at the start of the next session, and students could be asked how they would interpret or explain the differences (and similarities) among the responses of various groups.

6. One-minute papers can be used to assess and promote *class attendance and participation*.

Students may be awarded points for their one-minute papers that count toward their course grade; if they miss class, they lose the points. Students may be allowed a "free" or "forgiven" one-minute paper per term; if they are absent on a day when a one-minute papers was assigned, they will not lose those points. Students who are in class for all papers may be given extra credit for the one "free" minute paper that they were entitled to, but did not use.

Even if one-minute papers are not assigned in every class period, they can still function as a type of "pop quiz" that may "pop up" because instructors can use them in any class at any time. (For readers familiar with Skinnerian principles of positive reinforcement, periodically assigning one-minute papers in this manner serves to reward

students on a “variable schedule of reinforcement,” which is known to produce high response rates—in this case, high attendance rates.)

Furthermore, students are rewarded with points for carefully completing one-minute papers in class; thus, they are rewarded for actually doing something in class, not just for “showing up” to class. When I return one-minute papers the following, students who were absent from the previous class clearly see me returning papers to other students along with my personal comments on their papers. This sends a strong message to the absent students that we actually did something last class and they missed it. (Since I began using one-minute papers regularly, I’ve found that absent students are less likely to ask me the horrific question: “Did we cover anything important last class?”)

One-minute papers reward students for their participation in class, and since attendance is a precondition or prerequisite for this participation, they are also indirectly reward student attendances. In contrast, taking roll and noting students who are absent is a practice that doesn’t use positive reinforcement to promote student attendance; instead, it relies on negative reinforcement by penalizing students for missing class—i.e., by taking points away from them. Plus, taking roll can seem as if the instructor is playing the role of “truant officer and consumes class time that could be spent on learning.

Having students complete a one-minute paper at the end of a co-curricular experience can also be used a strategy for taking an immediate attendance count of the number of students who participated in the experience (co-curricular usage) and, at the same time, be used to assess the impact the experience had on students (co-curricular outcome).

7. One-minute papers can be used to promote student *punctuality*.

One-minute papers may be solicited at the very start of class to encourage punctuality and discourage tardiness. If a student is not in class at the time the question is asked, that student cannot answer it and gain the points associated with it.

8. One-minute papers can be used as a “writing-to-learn” strategy that promotes *writing-across-the-curriculum*.

The one-minute paper may be viewed as a focused, reflective-writing assignment that asks students to do deeper than rapidly recording lecture notes like a scribe. To ensure that students practice effective writing skills while completing one-minute paper, instructors can require that students use complete sentences to receive full credit. When I assign the first one-minute paper of the term, I point out to students that one-minute papers have the dual purpose of developing their thinking and writing skills because the two are inescapably interrelated; writing deepens thinking by slowing down the thought process and creating a thought product that can be seen, reviewed and improved. When I read students’ one-minute papers, I quickly note any egregious syntactical and spelling errors, but don’t subtract points for such mistakes. However, I will not award full credit if students do not construct complete sentences. I’ve found that this practice effectively encourages students to put effort into their in-class writing without causing them to feel unduly threatened or unfairly penalized in the process. I also attempt to write positive responses to students whose answers are particularly well written or whose writing has improved.

Asking students to complete one-minute papers after their co-curricular experiences serves to extend “writing across the curriculum” to “writing across the curriculum and co-curriculum,” encouraging students to reflect on and find meaning in their out-of-class learning experiences.

9. A succession of one-minute papers can function as an ongoing *learning log* or *learning journal*.

Students may be asked to complete successive one-minute papers on the same piece(s) of paper, so by the end of the term, they have a consecutive series of entries that approximates a log or journal. This also allows students the opportunity to conveniently review their previous responses, along with the instructor’s responses to them. This practice can help students see connections across course concepts and help them prepare for exams.

11. One-minute papers can help the instructor learn *student names*.

During the first two weeks of class, I use one-minute papers in all class sessions, not only to get students in the habit of regularly coming to class, but also to help me learn their names more rapidly. At the start of the term, I intentionally assign one-minute papers at the very end of class and have students leave the classroom as soon as they finish writing. Individual students invariably take different amount of time to finish their papers, so they do not all exit the room at the same time. When students come up individually to turn in their papers, it gives me the opportunity to view student faces and names (written on the minute paper) simultaneously; this expedites my learning of student names. Moreover, at the start of the following class session, I call students by name to come up individually to pick up their one-minute papers from me, which further strengthens my memory of their names and faces.

10. One-minute papers can be used to *personally validate* students.

It is not uncommon to find an example or experience cited in a student’s paper that poignantly illustrates a course concept. For example, if I ask for an anticipatory one-minute paper before beginning a new topic, I’ll jot down insightful student responses on a post-it sticker and quote the student when I get to that point in class. (Naturally, I select quotes that are poignant and powerful, but not personal.). Students are often touched by this practice because it reinforces their written contribution and validates them as individuals. This practice serves to showcase and model thoughtful student answers for other students to emulate, perhaps encouraging them to write in a similar fashion.

Periodically, when I receive an especially eloquent or insightful response from a student following discussion of a course topic, I’ll ask the student if I can include the student’s name along with the quote and project it at the start of the next class period. I’ve found this to be a particularly effective way to validate students; they often are flattered when they see their name and words “published” and publically recognized.

12. One-minute papers serve to strengthen *instructor-student rapport*.

After reading students’ one-minute papers, I write a short, personal response to them, addressing the student by name and signing my name at the end of my note; this gives it the look of a person-to-person

correspondence rather than an instructor-graded assignment. (I also don't write my response in red ink.) Sometimes, I don't respond directly to the student's answer to the one-minute paper, and use the opportunity to interact with students in a personable and empathic manner—for example, to acknowledge the return of an absent student (“Glad to have you back; I missed you last class”), express concern to a student who seems to be disengaged (“Everything okay?” “Anything I can do to help?”), or appreciate a student's efforts (e.g., “Thanks for your contributions to our class discussions.”)

The one-minute paper is not an assignment asking for students to give a correct answer or perform an academic task proficiently; instead, they are being asked to share their personal perceptions and experiences. Such questions are non-threatening and the responses students provide are conducive to my providing a personal reply. (In contrast to tests and term papers, where I must make evaluative comments on the validity of their answer to justify the grade I've given.) I have found that students don't have to respond anonymously in order to respond honestly and poignantly to course concepts if their responses are not evaluated for being correct or incorrect, but for their personal depth and authenticity.

For instance, I was once discussing the concept of defense mechanisms, and I gave a one-minute paper at the end of class that asked students if they had ever witnessed or experienced any of the defense mechanisms discussed in class today. Many of their responses involved sharing personal experiences or the experience of close family members. In my response to their papers, I express my appreciation for their willingness to share this information with me, and in some cases, I shared a similar experience of my own. Other times, I may write back with a short question about their shared experience, asking them to elaborate a bit on it when they submit their next one-minute paper. Such reciprocal sharing allows me to get “closer” to their students and communicate with them on a more personal basis. This humanizes the learning experience, showing students that they're more than a number on an Excel spreadsheet; it also provides the social-emotional foundation for building student-faculty engagement inside and outside the classroom.

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Durable & Universal Principles of Student Success:

Seven Student-Centered Educational Processes Strongly Associated with Academic Achievement and Degree Completion

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Introduction

A large and growing body of research indicating that remarkably different outcomes are achieved by institutions with very similar enrollments in terms of admissions selectivity, race, and ethnicity (Benjamin & Chun, 2003; Carey, 2004, 2005; CollegeBoard Advocacy, 2008; Kelly, Schneider, & Carey, 2010; Kuh, et al., 2005; Mortenson, 1997). These findings strongly suggest that differences exist in the educational environments of different institutions that impact student outcomes—above and beyond the students’ academic qualifications or personal characteristics at university entry. Not all educational environments and student success programs are created equal; the most effective ones are intentionally built on powerful principles of human learning and motivation. Promoting student success requires identifying and implementing critical *principles processes* that mediate and eventuate in “big ticket” terminal outcomes—such as student retention, academic achievement, and college completion.

Moreover, promoting student success isn’t simply a matter of adding on multiple, stand-alone support programs. Research indicates that colleges and universities with higher-than-predicted graduation rates don’t just “plug-in best practices” to improve their graduation rates (Engle & O’Brien, 2007). Trying to improve student-success rates simply by tacking on a series of separate, segmented initiatives runs the risk of creating “initiative fatigue” among members of the campus community responsible for student-success programs. As the American Association of State Colleges & Universities warns: “Adopting an action strategy based on ‘programs’ can send an unintended message that only those directly involved in them are responsible for student success. Ironically and unintentionally, this perspective may actually discourage widespread internalization of this responsibility in the form of a student centered culture” (AASCU, 2005, p. 26). Vince Tinto (1993) also notes that, “Ultimately the success of our actions on behalf of student learning and retention depends upon the daily actions of all members of the institution, not on the sporadic efforts of a few officially designated members of a retention committee” (p. 212). Similarly, John Bean (2005) points out that “changes in retention occur when the institution changes, not when a new program is added” (p. 237).

An alternative approach to advancing student success is to focus less on programs and more on *processes*—transferable principles or mechanisms that transcend the boundaries of specific programs and that can be “decontextualized”—applied campus-wide by all members of the campus community. Focusing on transferable processes that have campus-wide applicability moves us away from a “band-aid” approach to promoting student success that relies exclusively on supplemental, peripheral support programs, and moves us toward a more central, *systemic* approach in which multiple members of the campus community adopt common practices that work synergistically. A systemic

approach has the potential to exert a *transformative* on campus culture, shifting it in the direction becoming more learner-centered and student-success oriented. Melinda Karp, Senior Research Associate at the Community College Research Center, argues: “A shift is needed. Efforts to improve persistence should focus on processes, not programs. Shifting our lens to look at mechanisms rather than programs, we can see how reforms might result merely in ‘tinkering around the edges’ rather than the establishment of environments that truly help students create relationships or gain essential information” (Karp, 2011, p. 24). Deep and durable change doesn’t take place with “quick fixes”, “magic bullets” or intravenous injections of “best” (or “popular”) practices. Research on colleges and universities with unexpectedly high graduation rates indicates that they transformed themselves into student success-focused cultures (AASC&U, 2005; Carey, 2005; Kuh, et al., 2005).

Developing a culture of student success, like the development of any culture, requires a common language and common customs. In this manuscript, seven principles are identified that can provide a common language of student success and common success-promoting practices that may be adopted throughout the campus community. The following seven principles are *student-centered*—they focus on the student experience, and they are *research-based*—they are well grounded in higher education research and scholarship with a long history of empirical and theoretical support. The quantity of scholarship supporting the following principles, plus its consistency across different periods of time and different student populations, strongly suggests that they are timeless and universal:

1. *Personal Validation*
2. *Self-efficacy, Grit, and Growth Mindset*
3. *Finding Meaning and Purpose*
4. *Active Involvement (Engagement)*
5. *Reflection*
6. *Social Integration*
7. *Self-Awareness*.

These principles will be: (a) explicitly defined, (b) supported by scholarly citations pointing to their positive impact on student success, and (c) illustrated with specific strategies that put the principles into practice. Although the seven principles are distinct and discussed separately, the reality is that they don’t operate independently. Specific practices may be adopted that implement more than once of these principles simultaneously.

1. Personal Validation. Students are more likely to succeed when they feel personally *significant*—when they are recognized as *individuals*, feel that they *matter* to the college and that the college *cares* about their success (Muraskin, et al., 2004; Rendón, 1994; Rendón-Linares & Muñoz, 2011; Schlossberg, Lynch, & Chickering, 1989; Terenzini, et al., 1996).

In contrast, student success is impeded by college practices and policies that devalue, depersonalize, or marginalize students. Vince Tinto eloquently captures the importance of personal validation in his landmark book, *Leaving College: Rethinking the Causes and*

Cures of Student Attrition, “Students are more likely to become committed to the institution and, therefore stay, when they come to understand that the institution is committed to them. There is no ready programmatic substitute for this sort of commitment. Programs cannot replace the absence of high quality, caring and concerned faculty and staff” (1987, p.176).

One of the first large-scale studies highlighting the importance of personal validation was an extensive national survey of 947 postsecondary institutions, both two-year and four-year, in which retention officials on these campuses were asked: “What makes students stay?” The most frequently cited response to this question was “a caring faculty and staff” (Beal and Noel, 1980). Based on their national research on students’ transition to college, Terenzini, et al. (1996) reached a similar conclusion: “The formal and informal mechanisms by which an institution sends subtle signals to students about how valued they are should be reviewed and revised to provide early validation for students” (p. 9). This conclusion holds true for all students, but it’s particularly true for underrepresented students who come from families without a college-going tradition (Rendón-Linares & Muñoz, 2011).

Practices that Promote the Principle of *Personal Validation*

- * First-year *convocation* ceremonies in which members of the college community assemble to personally welcome and celebrate new students’ entry into higher education
- * Advisors, instructors, and support staff who learn the *names* of their students, refer to them by name, and know *about them* (e.g., their educational plans and personal interests)
- * *Personalized correspondences* with students that mention them by name, recognize their individual accomplishments, and acknowledge their achievement of educational milestones (e.g., personal e-mail messages congratulating students for their co-curricular contributions, attaining academic excellence, or regaining good academic standing following academic probation)
- * Seeking out *student perceptions and feelings* about their campus experience (e.g., satisfaction surveys, opinion polls, and focus groups)
- * Maximizing *student representation* on campus committees and policy-forming bodies (e.g., student government, student life committee, student engagement taskforce)
- * *End-of-first-year event* that celebrates students’ completion of their critical freshman year, including an award ceremony for outstanding first-year academic and co-curricular achievements

2. Self-Efficacy, Growth Mindset, & Grit. Success is maximized when students believe: (a) they can *influence or control* their educational fate, (b) their intelligence isn’t “fixed” but can be “grown,” and (c) that positive academic outcomes are achieved through personal *effort, perseverance, and resilience* (Aronson, Fried, &

Good, 2002; Bandura, 1977, 1997; Chemers, Hu, & Garcia, 2001; Csikszentmihalyi, 1990; Dweck, 2000, 2006; Duckworth & Kern, 2011; Elias, & Loomis, 2002; Multon, Brown, & Lent, 1991; Paunesku, et al., 2015; Rendón & Garza, 1996; Solberg, et al., 1993; Weiner, 1986, 2000).

Meta-analyses of multiple research studies indicate that academic self-efficacy is the most potent predictor of student retention and academic achievement (GPA) (Robbins, et al., 2004), particularly for underrepresented students (Zajacova, Lynch, & Espenshade, 2005; Vuong, Brown-Welty, & Tracz, 2010).

Practices that Promote the Principle of *Self-Efficacy, Growth Mindset, and Grit*

Drawing from decades of research on his theory of self-efficacy, Bandura (1997) identifies the following key conditions that promote self-efficacy.

* *Positive expectations*: receiving verbal affirmation from others that success is achievable and that previous performance can be improved. This condition can be created by supplying students with constructive *feedback* that:

(a) construes ability as an acquirable skill and identifies specifically what needs to be done to improve future performance

(b) highlights educational progress and development of personal competencies relative to previous levels of performance, and

(c) builds on performance-evaluation practices that base grades on achievement of absolute standards (criterion-referenced grading), rather than by competitive social comparisons with others—norm-referenced grading (grading “on a curve”).

* *Vicarious (modeling) experiences*—observing others similar to oneself who are successful. This condition is created by exposing students to successful peers with whom they can identify (e.g., tutors, mentors, and young alumni), as well as students who have demonstrated grit by bouncing back from setbacks (e.g., students who recovered from academic probation and achieved academic success).

* *Moderately challenging tasks* that create an optimal level of stress—which are perceived as stimulating, rather than threatening or anxiety-provoking. This condition is by “scaffolding” practices, such as the following:

(a) *College-entry assessments* that place newly admitted students in courses or programs that are moderately challenging and commensurate with their entry-level skills

(b) *Summer bridge* programs for students who are academically under-prepared or at-risk at college entry

- (c) *First-year experience programs* and *first-year seminars* that provide new students with extended support beyond new-student orientation to help them meet college-transition challenges throughout their critical first term
- (d) Collaboration between *course instructors* and *academic support services* to facilitate timely *referral* of students who need academic support
- (e) Providing students with *scaffolds* early in the term to support their success (e.g., checklists of criteria that will be used to evaluate their performance; models of excellent performances to emulated and poor performances to be avoided)
- (f) *Early-feedback* practices that alert students about improving the quality of their work performance before it eventuates academic failure (e.g., early, low-stakes testing in courses; formal early-alert/early-warning systems; midterm-grade reports)
- (g) Careful attention to *course pre-requisites* and *co-requisites* that ensure that students have the requisite skills needed to succeed in more advanced courses in the discipline
- (h) *Supplemental instruction* in first-year courses that have disproportionately high failure and withdrawal rates
- (i) Early identification and recruitment of *high-achieving* students to *honors* programs that provide them with optimal challenge and encourage their involvement in peer tutoring

3. Finding Meaning and Purpose. Students are more likely to succeed when they find *meaning or purpose* in their undergraduate experience—when they appreciate the *significance* of their college education and make *relevant* connections between academic learning, their current life, and their future goals (AAHE, ACPA, & NASPA, 1998; Ausubel, 1978; Daloz, 2012; Fink, 2002; Kuh & O'Donnell, 2013; Mezirow, 2000; Nash & Murray, 2010; Palmer, 2000; Parks, 2000; Ryan & Deci, 2000; Wlodkowski, 1998).

In what was likely the first book explicitly devoted to the topic of increasing student retention, Lee Noel offered the following observation—based on his extensive experience consulting with colleges and universities nationwide: “As the bottom line, we find that student re-enroll when they are having a substantive learning and personal growth experience that they can relate to their future development and success” (1985, p. 2). This conclusion is reinforced by classroom-based research at both the secondary and postsecondary level, which demonstrates that when students see the relevance of course concepts and course assignments for their lives, their academic motivation and academic performance increase significantly (Hulleman & Harackiewicz, 2009; Hyungshim, 2008).

Practices that Promote the Principle of *Finding Meaning and Purpose*:

- * Intentionally articulating to students the meaning and value of *general (liberal) education* and the benefits (fiscal and personal) of a *college degree*—e.g., via academic advising or first-year seminar, and by exposure to alumni who’ve benefited from the college experience
- * Helping students make meaningful *connections* between *courses and disciplines* (e.g., interdisciplinary courses/programs, team-taught courses, and learning communities in which participating faculty intentionally integrate content taught in their respective courses)
- * Facilitating meaningful connections between *academic* learning and *experiential* learning (e.g., course-integrated service learning or leadership development experiences)
- * Creating connections between the *curriculum* and *co-curriculum* (e.g., course-integrated assignments that connect courses with co-curricular experiences on campus)
- * Academic advising that helps students clarify their *educational goals* and connect their current academic experience with their future life plans
- * Collaboration between academic departments, academic advising and career counseling to help students make meaningful connections between *majors and careers*
- * First-year seminars that actively engage students in the process of *long-range educational planning* via assignments that require them to develop an undergraduate plan for general education, exploration or confirmation of an academic major, and tentative career plans
- * *Reality-based* learning experiences—e.g., case studies, problem-based and project-based learning, role plays, and simulations—which prompt students to apply what they’re learning to real-life contexts and situations
- * *Senior-year experience* courses and programs that encourage students to reflect on their college experience, take stock of what they learned, and apply it to their post-college decisions and transition

4. Active Involvement (Engagement). Student success increases proportionately with the depth of student *involvement* in the learning process—i.e., the amount of *time* and *energy* students invest in their college experience—both *inside* and *outside* the classroom (Astin, 1984, 1996, 1999; Chickering & Gamson, 1987; Christensen, Garvey, & Sweet, 1991; Kuh, et al., 2005; Kuh & O’Donnell, 2013; McKeachie, et al., 1986; National Institute of Education, 1984; Pace, 1980, 1990; Pascarella & Terenzini, 1991, 2005).

The research base supporting the principle of active involvement (student engagement) is so formidable that it has been referred to as the “grand meta-principle” of student

learning (Cross, 1999). Following a voluminous and meticulous review of 2500 studies, dating back to the late 1960s, Pascarella and Terenzini (1991) offered the following summary statement: “Perhaps the strongest conclusion that can be made is the least surprising. Simply put, the greater the student’s involvement or engagement in academic work or in the academic experience of college, the greater his or her level of knowledge acquisition and general cognitive development” (1991, p. 616). This finding holds true for both majority and minority students, even after controlling for students’ college-entry characteristics (Kuh, et al., 2007).

One of the distinguishing characteristics of campuses with higher-than-predicted graduation rates is faculty use of engaging classroom pedagogy (Laird, Chen, & Kuh, 2008). Research also demonstrates that students who become actively involved in campus life and support services outside the classroom are more likely to persist to college completion (Kuh, 2005; Kuh, et al., 1994, 1995; Pascarella & Terenzini, 1991, 2005).

Practices that Promote the Principle of *Active Involvement (Engagement)*

* Engaging, *student-centered* instructional practices, such as:

- (a) Interactive large-group (whole-class) discussions prompted by effective, open-ended questions
- (b) Small-group discussions (pairs, triads, or quads) that allow all students—not just the most assertive or most verbal—to become more actively involved in the classroom

* Engaging students in academic support services through *intrusive* (assertive) outreach—i.e., delivering support *to* them, rather than passively waiting and hoping that students take advantage of these services on their own. For example, first-year experience courses that introduce new students to student-support professionals by bringing them to class as guest speakers, or by course assignments that require students to utilize key student-support services on campus

* Incentivizing and recognizing student involvement in campus life. For example, a co-curricular or *student development transcript*—comparable to the traditional registrar-issued transcript of completed courses—that formally lists and documents students’ co-curricular achievements and makes them available to employers and graduate schools

* Soliciting *student input and feedback* about the quality of their experiences at the college via surveys, focus groups, and personal interviews.

5. Reflection. Student success is optimized when students *reflect* on their learning experiences, *think deeply* about them, and *transform* them into a form that relates to what they *already know* or have *previously experienced* (Baxter Magolda, 2004; Belenky, et al., 1986; Bransford, Brown, & Cocking, 2000; Bruner, 1990; Colley, et al., 2012; Dewey, 1938; Ewell, 1997; Flavell, 1985; James, 1890; Kahneman, 2011; Kuh & O’Donnell, 2013; Piaget, 1972; Rogers, Kuiper, & Kirker, 1977; Svinicki,

2004; Symons & Johnson, 1997; Vygotsky, 1978).

Deep learning requires both *action* and *reflection*. Students need to “get into” it (active involvement) and “step back” from it to process what they’ve learned (reflection). Brain research reveals that active involvement and reflection are two distinctively different states of consciousness. Active involvement is a mental state characterized by fast, low-amplitude brain waves that engage *attention*—enabling the learner to get information into short-term (working) memory. Reflection is a mental state characterized by slow, high-amplitude brain waves that promote *consolidation*—allowing the brain to store (retain) information by transferring it from short-term to long-term memory (Bradshaw, 1995; Bligh, 2000).

Practices that Promote the Principle of *Reflection*

- * Punctuating classroom lectures with *periodic pauses and questions* that prompt students to think deeply about the content being presented
- * “*Writing-to-learn*” assignments that encourage students to reflect on their academic learning experiences and relate them to their personal experiences (e.g., one-minute papers)
- * Encouraging student *reflection on out-of-class learning experiences* (e.g., reaction papers and portfolios)
- * Having students create *concept maps* and *graphic organizers* that require them to reflect and connect separate ideas into integrated concepts

6. Social Integration. Student success is facilitated by *interpersonal interaction, collaboration*, and formation of *relationships* between students and other members of the college community—peers, faculty, staff, administrators, and alumni. (Astin, 1993; Berger & Luckman, 1967; Bruffee, 1993; Johnson, Johnson, & Smith, 1998; Pascarella & Terenzini, 1991, 2005; Ryan & Deci, 2000; Slavin, 1996; Tinto, 1993, 2012; Vygotsky, 1986).

Studies consistently show that students who become socially integrated into the campus community are more likely to complete their first-year of college and persist to degree completion (Pascarella & Terenzini, 2005; Tinto, 1993). Experiencing a sense of belongingness is particularly important for promoting the achievement of underrepresented students who are more likely to face stereotypes and may doubt whether they “fit in” a college community (Walton & Cohen, 2011).

In a classic, seven-year study of more than 2,300 graduating seniors at nine different colleges and universities, these soon-to-be graduates were asked about the factors that contributed most to their college success. The top-two factors they cited were: (a) personal contacts with other students, and (b) personal contacts with faculty and staff (Willingham, 1985). Similar findings were reported by Astin (1993) who conducted a

longitudinal study over a 25-year period that included a national sample of approximately 500,000 students and 1300 institutions of all types. He found that the frequency of student-faculty and student-student interaction correlated significantly with *every* academic achievement outcome examined, including: college GPA, degree attainment, graduating with honors, and enrollment in graduate or professional school.

Tinto (2012) identified four possible explanations why a sense of social membership promotes student success: (a) it provides social support that eases new students' transition to college and reduces academic stress; (b) it enhances students' self-esteem which, in turn, strengthens academic performance; (c) it enables students to more readily access informal, college knowledge from their peers, which helps them navigate the postsecondary environment; and (d) it strengthens students' attachment and commitment to the college, which motivates them to remain enrolled.

Practices that Promote the Principle of *Social Integration*

- * *New-student orientation* programs that go beyond information dissemination and orientation of students to campus buildings by connecting new students with each other, with peer leaders, student support professionals, and college faculty
- * *Common reading* programs that provide students with a shared learning experience and a common topic of conversation
- * *Learning communities* in which cohorts of students co-register for the same block of courses during the same academic term, giving them the opportunity to congeal into a supportive peer community
- * *Small-group* work that connect students with their classmates (e.g., small-group discussions and group projects)
- * *Collaborative and cooperative* learning experiences that transform group work into *teamwork* by having students take on complementary roles, build consensus, and work interdependently to complete a common product
- * Creating intentional *places or spaces* on campus for students to work with peers, peer tutors/mentors, advisors, and faculty (e.g., learning commons)
- * Intentionally forming *affinity groups* among peers who share similar interests and experiences (e.g., commuter club, departmental clubs, special-interest groups)
- * Incentivizing *student-faculty contact outside the classroom* (e.g., free-meal or reduced-cost vouchers for faculty who dine with students)
- * Increasing student *employment* and *residential* opportunities to maximize the amount of time students spend on campus interacting with other members of the college community

* Using *social media* to create on-campus social networks—Facebook, Twitter, and “online purpose networks”—campus-based online communities intentionally designed to support students’ social integration and success by connecting them with campus “friends” such as: classmates, peer mentors, faculty, advisors, and student-support professionals.

7. Self-Awareness. Students increase their prospects for success when they gain self-insight into and remain mindful of their: (a) learning strategies, styles, and habits, (b) ways of thinking, and (c) personal talents, interests, and values (AAHE, ACPA, & NASPA, 1998; Brooks, 2009; Buckingham & Clifton, 2001; Hart, 2004; Langer, 1997; Pintrich, 1995; Schön, 1987; Smith, 2011; Weinstein & Underwood, 1985; Zimmerman, 1990).

Research demonstrates that “successful students know a lot about themselves” (Weinstein & Meyer, 1991, p. 19). High-achieving students are aware of the thought processes and cognitive strategies they use while learning—i.e., they engage in “meta-cognition”—they think about how they are thinking (Weinstein & Underwood, 1985). Successful college students also engage in two other forms of mindfulness: (a) *self-monitoring*—they are aware of whether they are truly comprehending what they’re attempting to learn (Weinstein, 1994), and (b) *self-regulation*—they adjust their learning strategies to accommodate the specific demands of the type of different academic (Pintrich, 1995).

Practices that Promote the Principle of *Self-Awareness*

* Academic advising and career counseling strategies that stimulate students’ self-awareness of personal *strengths (talents), interests and values*, and their implications for student choice of a *major and career choice*

* Writing assignments that encourage *introspection* and reflection on personal values and priorities (e.g., journaling for self-awareness)

* Having students to complete self-assessment instruments that promote self-awareness of their *learning styles, habits, and strategies*

* Encouraging students to *self-monitor* their learning by periodically stopping to check whether they are learning deeply (e.g., paraphrasing key concepts in their own words, or explaining them to a classmate).

* Engaging students in *metacognition*—prompting them to think about the thought processes they use while learning and solving problems (e.g., via one-minute reflection papers, learning logs, or learning portfolios)

* Increasing student *awareness of successful strategies* by asking them to think about what they did on tests and assignments where they succeeded or improved dramatically

(e.g., Why do you think you were so successful this time? Could it be done again to promote success in the future?)

Summary and Conclusion

Research reviewed in this manuscript strongly suggests that there are seven, timeless and universal principles of student success. In sum, students are more likely to be successful when they:

- (1) feel personally validated and sense that the college cares about them as individuals;
- (2) believe that personal effort is associated with educational achievement and that success is strongly influenced by individual determination and perseverance;
- (3) develop a sense of purpose and perceive their college experience as relevant and personally meaningful;
- (4) become engaged in the learning process and actively involved with campus resources;
- (5) reflect on what they're learning and connect it to what they already know or have previously experienced; and
- (6) become socially integrated (interpersonally connected) with other members of the college community; and
- (7) are self-aware of the thought processes and cognitive strategies they use while learning, and are mindful of their personal talents, interests, and values when making educational and career choices.

These principles may be used as guidelines for designing and delivering “best practices.” Effective practices are built on effective principles; without the latter, the former remain theoretically groundless. The seven principles discussed in the manuscript may be used as touchstones or cornerstones for evaluating the effectiveness of the program-delivery process. An evaluative grid or matrix could be created in which the seven principles are cross-hatched with key campus programs to assess how well each program aligns with the principles. A “gap analysis” could then be conducted to identify aspects of the program that may require more intentional integration of personal validation, social integration, etc. into its process of program delivery.

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The Role of Staff in Promoting Student Retention & Student Learning in Higher Education

The positive impact that staff can have on promoting student retention (persistence to degree completion) has been noted repeatedly in the research literature. The first large-scale research finding pointing to the influence of staff on student retention was reported by Beal and Noel (1980), who conducted a large-scale survey of 947 colleges and universities, both two-year and four-year, asking retention officials on these campuses: "What makes students stay?" Ranking first in response to this question was "a caring faculty and staff." Tinto (1987a) reported interview results obtained from withdrawal-prone students who persisted to graduation. These students were asked if they could identify one thing about their college experience that was most responsible for their remaining in college and completing their degree. The most common response, by far, was that some member of the faculty *or staff* at the institution took a personal interest in them, i.e., someone was genuinely concerned about their individual welfare and progress. In his subsequently book on student retention, Vince Tinto (1987b) eloquently expressed the upshot of this finding:

Students are more likely to become committed to the institution and, therefore stay, when they come to understand that the institution is committed to them. There is no ready programmatic substitute for this sort of commitment. Programs cannot replace the absence of high quality, caring and concerned faculty *and staff*" (p. 176, italics added).

Because of their direct, first-hand contact with students on a regular basis, staff members also have the potential to function as assessment agents by gathering data on student experiences that may be used to promote institutional effectiveness and continual quality improvement. For example, they can assess whether students are receiving clear and fair communication about campus policies and procedures, and are encountering the least amount of organizational red tape and insensitive institutional bureaucracy.

In addition to the impact of staff and educational programs on student retention, Berger (2000) offers an additional approach to understanding and predicting student attrition (withdrawal) that has its roots in ***organizational theory***. Following a review of the student attrition literature, he concluded that different patterns of organizational behavior on campus do affect the retention of undergraduate students; he postulates that students are more likely to be retained when:

- (a) they are provided with accurate information and clear lines of communication about institutional purposes, policies and procedures, and
- (b) they experience a level of institutional bureaucracy that is not so intensive or pervasive that it frustrates rather than supports their progress (Berger, 2001-2002).

Berger's postulates are supported by a national study of over 300 colleges and universities, which revealed that higher levels of collegial and personalized organizational behavior were found to promote student retention; in contrast, higher levels of hierarchical bureaucracy were found to have an adverse effect on student persistence (Ewell, 1989). Braxton & Brier (1989) and Berger & Braxton (1998) also discovered that students are more likely to persist when they perceive organizational policies to be fair, organizational communications to be clear and organizational decision-making to be participative. Lastly, Cameron and Ettington (1988) found that organizational cultures that are highly collegial, described by their members as a "personal place" or as an "extended family," have positive effects on student satisfaction—a precursor of retention.

In a doctoral dissertation designed to identify key factors that impact the successful performance of students and staff, Vieira (1996) reported results indicating that positive student interaction with

staff has a positive effect on students' institutional satisfaction and persistence. Conversely, poor student-staff relationships were associated with student dissatisfaction and disconnection with the campus. Furthermore, it was discovered that staff members benefit from positive relationships with students, as evidenced by increased staff satisfaction with their work, increased satisfaction with their interactions with students, and a stronger feeling that their work had educational value.

Lastly, certain factors were found to be consistently contributed to positive student-staff interaction and the provision of quality student service, namely: staff training, empowerment, teamwork, reward, and association with other service providers. Conversely, lack of empowerment, hierarchy, territoriality, and dissociation from other service providers were found to detract from the provision of quality service to students.

Chickering & Gamson (1991) argue that staff may not only play a role in promoting student retention, but promoting student learning as well:

The single most important ingredient for improving *education* in any institution is an organizational culture that values, nourishes, and provides support for efforts to become more effective professionals. This kind of culture emphasizes quality performance from administrators, faculty, support staff, and students" (p. 57, italics added).

Support staff at institutions of higher learning also have the potential to be much more than customer service agents; they can also be experiential educators and student success agents. This expanded view of staff embraces the traditional emphasis on customer service, but is more inclusive and embraces the idea that students are more than customers; they are also clients and, ultimately, our "products" after graduating and assuming occupational and leadership positions. The work performed by support staff in a "learning organization" has loftier goals than the corporate world; it goes beyond merely satisfying customers and maximizing profit to enriching the lives of students and contributing to their future success.

In addition, because of their direct, first-hand contact with students on a regular basis, staff members also have the potential to function as assessment agents by gathering data on student experiences that may be used to promote institutional effectiveness and continual quality improvement. For example, they can assess whether students are receiving clear and fair communication about campus policies and procedures, and are encountering the least amount of organizational red tape and insensitive institutional bureaucracy.

Staff working on college campuses can play a major role as *educators* who contribute to students' *learning, development, and persistence to graduation* in the following ways:

- a) by the behavior they *model*,
- b) by their sensitive and reasoned *explanations and interpretations* of college policies for students,
- c) by how they handle student *conflicts* with college personnel,
- d) by their responsiveness to and referral of students in *crises*, and
- e) by their *instruction and mentoring of student employees* (e.g., work-study students).

The educational potential of staff can be maximized if campuses taking a more inclusive approach to promoting student success by being more intentional about:

- * including staff in professional development opportunities,
- * involving staff on key campus committees, and
- * encouraging staff to be research and retention agents by seeking out and systematically documenting students' campus perceptions and experiences, documenting "critical incidents," and contributing ideas for streamlining or minimizing institutional bureaucracy

Unfortunately, staff influence of staff on promoting students retention, learning, and development has been underestimated, underutilized, and underappreciated on most college and university campuses. Robert Parker, Director of Human Resource at Stanford University, reports that,

The best organizations see employees as contributing directly to the purposes of the organization and its success, [however] staff often feel like second-class citizens who are shown little appreciation and who aren't sure in what way their jobs make a difference to the school (1983, p. 1).

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THE STUDENT INFORMATION SHEET

A Proactive Strategy for Personally Validating Students & Establishing Instructor-Student Rapport

Joe Cuseo

How I Use the Student Information Sheet

Probably the first and foremost goal in any course should be to establish rapport with the class students. Meeting students' need for acceptance and validation may be viewed as a precondition for establishing the social-emotional foundation needed for subsequent learning and personal growth. It has been my experience that students begin to care more about learning and become more committed to the learning process when they sense that their instructor cares about them.

One way to gain and maintain instructor-student rapport is through use of what I call the "Student Information Sheet." The sheet contains questions for students to answer, which I've divided into six general areas: (1) personal background, (2) future plans, (3) personal abilities, achievements, and distinctive qualities, (4) personal interests, (5) personal values, and (6) course expectations, expectations and interests. See pp. 5-6 for a list of potential questions relating to each of these six categories. (I don't use all these questions; I use them as a pool to choose from, depending on the course or class I'm teaching.)

On the first day of class, I distribute the course syllabus, but do not spend class time systematically reviewing it. Instead, I tell students that their first assignment is to read the syllabus for the next class session and that I prefer that our first meeting together should focus on "people not paper." I tell the class we're going to take some time to get to know each other a bit before we delve into the subject matter and then project questions related to the aforementioned six areas of the student information sheet. I preface the exercise by explaining that it will help me become more comfortable interacting with them and help them feel more comfortable interacting with me. I also mention that the information will help me to better connect the course to their personal experiences, interests, and goals. (I also note that this should be the first step in any working relationship and in any profession or career they may be pursuing.) Lastly, I mention that if there's any question they feel uncomfortable about answering, they have "the right to remain silent" and just leave it blank.

I reveal one question at a time, and have students record their answers to each question on a sheet of paper. At the same time students are recording their answers, I write my answers on the board to the same questions. For questions that do not pertain directly to me, such as their class standing, I answer with indirectly comparable information (e.g., how many years I've been teaching, or what year in college I took the course they're currently taking). By answering the questions along with your students, I show my class that I trust them well enough to reveal something personal about myself, which in turn, makes them feel more comfortable about revealing more of themselves to me. Also, my answering the questions with them serves to validate the exercise, suggesting that it's worthy of my time and effort as well.

This exercise typically takes about one minute per question, i.e., 40 questions takes approximately 40 minutes. I typically use no more than 30 of the questions because I want to reserve some class time to collect the information sheets and review students' names. I like to keep the process moving fairly quickly by advising students that they can use short sentences or single words and phrases to answer the questions (as I do on the board). Also, short and fairly quick responses often seem to capture students' true thoughts or feelings in response to the question (their "free associations")—as opposed to constructing more

calculated, socially-acceptable responses. Also, the questions are “open-ended,” inviting a wide range of possible answers; this often results in responses that are richer and more revealing than those obtained from multiple-choice or forced-choice personality assessments or personal interest inventories.

After the exercise is completed, I collect each student’s information sheet at the end of class and use it to for a variety of purposes throughout the term—including the 12 ways listed below. (Note: Some instructors with whom I’ve shared the information-sheet idea prefer to have the students answer the questions outside of class time and submit it as their first assignment—either on paper or online. One instructor who does this also has students submit a photo along with the information sheet to help him learn student names.)

1. On the first day of class, after I’ve collected all the information sheets, I call-out the names of individual students, asking them to raise their hand when their name is called so I can associate their *name and face*. As I call out their names, I very rapidly jot down a quick word or abbreviated phrase next to the student’s name for later review (e.g., something about a distinctive physical feature or seating spot that can help me remember the student’s face and name).

2. Before the next class meeting, I read all student responses to the questions and highlight one from each student’s sheet that is thought-provoking or stimulating. I come to the second class session with something highlighted on each student’s sheet; I start class by calling out each student’s name and ask each student in class for a brief elaboration on the item I’ve highlighted (e.g., When did you move from New York to California? When you worked with handicapped children, what type of assistance did you provide?) This shows all students that I’ve taken to time to read their information sheets and am taking an *individual interest* in each one of them. The short verbal interchange I have with each student also helps me immensely in learning their names because it allows more eye-contact time than that which occurs during a simple roll call, and it provides a distinctive event or interactive “episode” to which I can relate (associate) their face and name.

3. Throughout the term, I use the information sheet to *actively involve* individual students in the course. I make note of interests that students mentioned on their information sheets which relate to topics or concepts. I’ll be covering the course, jot down these interests along with the student’s name on a post-it note, and stick the note onto my class notes—next to the topic or subtopic that relates to the student’s interest. When I get to that topic later in the term, I introduce it by mentioning the name of the student who had expressed interest in that topic on the first day of class. Students really perk-up when they hear their name mentioned in conjunction with the topic and they’re often stunned by my apparent ability to remember the interests they expressed on the very first day of class so much later in the term. Students rarely ask how I managed to remember their personal interests, so they’re unaware of my “crib sheet” strategy. Instead, they tend to conclude that I have extraordinary social memory and social sensitivity (which is perfectly fine with me).

I also use the student information sheet for the following purposes.

4. To make final decisions about what particular *topics* to cover in the course.

I’ll use student interests expressed on the information sheet to help prioritize course topics and subtopics. Although I decide on a set of core concepts or topics to be covered in the course, I use information gleaned from students’ sheets to decide on what other “supplemental” topics I’ll cover. I inform the class that I’ve used their input to help me decide on what topics to include in the course and have them add these topics to the course syllabus. This gives students a sense of course input and course ownership, which I think serves to enhance their intrinsic motivation. (The student information sheet has also enabled me to keep up with changes in students’ interests, values and goals across time and generations. It could be said that it’s as important for us keep up to date with our current student audience as it is to keep up to date with current developments in our field.)

5. To make personal connections with *non-participative* or “*detached*” students.

Before class, I may strike-up a conversation with a shy student about something from her information sheet. Or, as students leave the classroom at the end of class, I typically stand by the door as they depart.

When a quiet or non-participative student is leaving, I'll quickly ask that student something relating to his information sheet.

6. To connect my course with *other courses* students are taking in the same term.

One question on the information sheet asks students for their current class schedule. I make note of other courses they're taking and, whenever possible, attempt to relate material in my course to their other courses. For instance, when I'm covering mnemonic devices in general psychology or the first-year seminar, I will use examples for improving memory that apply to content they may be learning in their other classes.

7. To intentionally form *small discussion groups* and *student learning teams*.

Using student information gleaned from their sheets, I may create homogeneous groups consisting of students with the same career interests, or heterogeneous teams comprised of students from different geographical areas or cultural backgrounds.

8. To *personalize written feedback* I give to students during the term.

For instance, if a student initially expressed interest in joining a student club or finding an on-campus job, I'll ask about that along with written feedback I provide the student on one-minute paper she completed in class.

9. To prepare for and personalize students' scheduled *office visits*.

I will look over a student's information sheet prior to an office visit and refer to something mentioned on the sheet during the student's office visit.

10. To personalize and enliven the process of *returning student assignments* in class.

Periodically, I look over my students' information sheets just before going to a class session when I'll be returning student assignments, and instead of calling out the names of students to come up and retrieve their assignments, I'll call out some piece of information I remember from their information sheet. For example, I might say: "Will a future occupational therapist from Maryland please come up and pick-up your assignment?" (This demonstrates to students at later points in the term that I still know them well.)

One instructor asks students a question on the information about their favorite song or tune is, and plays the favorite song/tune of one student at the start of each class

11. To *showcase articulate* comments and *insightful* ideas generated by students.

I will look for comments and ideas shared by students on their information sheet that may relate to a course topic and display them on a document camera (ELMO) when we get to that particular topic in class. For example, there is a question on the information sheet that asks students for their favorite quote. One student wrote: "When you point your finger at someone else, there are three fingers pointing back at you." This succinct saying really captures the gist of projection—a defense mechanism that I cover in class under the topic of self-efficacy. When I reached the point in the course when I discussed that defense mechanism, I projected the student's quote along with her name and used it to introduce the concept of projection. This practice serves to validate students' ideas, plus students really seem to get a charge out of being quoted; it makes them feel special and that their ideas are worthy of being shared with a wider audience.

12. To personalize *test questions* on *exams*.

I use the information sheets to construct test questions relating to individual students' interests. For instance, in a first-year seminar test covering the topic of major/career choice, I include student names on questions that relate to their particular major or career interest (e.g., "Jennifer P. is interested in both Art and Business, so she decides to major in Art and minor in Business. Approximately how many courses in Business will she need to complete a minor in this field?").

Conclusion

The student information sheet has turned out to be my most versatile and effective, student-centered strategy. By taking a little time at the start of the course to focus not on course content or the course schedule, but on the student as a person, students sense that I'm interested in them and they, in turn,

become more interested in me and my course. They become intrinsically interested in attending class, more participative in class, more willing to seek contact with me outside of class, and more likely to respond positively (vs. defensively) to my instructional feedback.

Having students complete a personal information sheet on the first day of class has created a much more favorable first impression of the course than a perfunctory review of the course syllabus, and information from their sheets may be used in a variety of ways throughout the course to help students make meaningful connections with the course, the course instructor, and their classmates.

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Continued →

Potential Questions for the Student Information Sheet

PERSONAL BACKGROUND INFORMATION

1. Your name (as you prefer to be called)?
2. Phone number/E-Mail address (optional)?
3. Place of birth? Places lived? Are you currently, living on campus (where) or commuting (from where)?
4. If you're commuting to campus, what's the length of your commute time from home to campus? What is your means of transportation?
5. What is your class schedule this term? (Course titles and times)?
6. Are you a freshman, sophomore, junior, senior? (How many college credits have you completed?)
7. Why did you choose this college? (What brought you here?)
8. Have any of your family members attended college? Completed college?
9. Have you attended any other colleges? (If yes, where and when?)
10. What jobs or volunteer experiences have you had?
11. Will you be working or volunteering this term? If so, how many hours per week? On or off campus?
12. Will you have family responsibilities this term?
13. Who or what has had the greatest influence on your life? (In what way?)
14. What do you think has been the most significant event in your life thus far?
15. What would you say has been the biggest challenge, obstacle, or setback that you've overcome in life?
16. If there were something in your life you could change or do over again, what would it be? Why?
17. What would you say has been your greatest achievement or accomplishment in life?

FUTURE PLANS

1. What do you think will be the most significant event, experience or decision you'll face in the near future?
2. Have you already made a decision about a college major or are you still exploring different options? (If you've already decided on a major, how sure are you about this choice? What led you to that choice?)
3. Have you decided on, or strongly considering a certain career? (If yes, how sure are you about this choice? What led you to choose or consider it?)
4. When you imagine or fantasize about your future, what does it usually involve?
5. Do you plan to graduate from this college?
6. What do you see yourself doing within six months after college graduation?

PERSONAL ABILITIES, ACHIEVEMENTS, & DISTINCTIVE QUALITIES

1. What seems to come easily or naturally to you?
2. What would you say is your greatest talent or personal gift?
3. What would you say are your most advanced or well-developed skills? What skills you would like to strengthen or improve?
4. On what types of learning tasks or activities have you experienced the most success?
5. In what types of courses do you tend to earn the highest grades?
6. When you've experience a strong feeling of being successful, what is it that you did you are doing or have done?
7. If others come to you for help or advice or assistance, what is it usually for and why do you think they come to you?
8. What three words do you think best describe you?
9. What would your best friend(s) say is your most likable quality, trait, or characteristic?
10. What would you say has been your greatest achievement or accomplishment in life?
11. If you've received awards or other forms of recognition, what have you received them for?

PERSONAL INTERESTS

1. What sorts of things do you look forward to, or get really excited about?
2. What tends to capture your attention and hold it for long periods of time?
3. How do you learn best?
4. What do you really enjoy doing and do as often as you possibly can?
5. When time seems to "fly by" for you, what are you usually doing?

6. When you're with your friends, what do you like to talk about or spend time doing together?
7. What has been your *most* enjoyable and *least* enjoyable learning experience?
8. Have you ever taken a course you were sad to see end? If yes, what was the subject matter of that course and why did you want to see it continue?
9. If you've had previous work or volunteer experience, what jobs or tasks did you find most interesting or stimulating?
10. What are your favorite hobbies or pastimes?
11. How do you relax and unwind?
12. If you had a day, week, or year to go anywhere you wanted to go, and do anything you wanted to do, where would you go and what would you do?
13. If you tend to surf the Internet, what topics do you tend to surf or search for?
14. If you read news on the internet or in a newspaper, what news category do you tend to read first?
15. What's your favorite movie and/or TV program?
16. What's your favorite music or musical artist(s)?
17. Is there anyone dead or alive, real or imaginary, whom you've never met but would like to meet and have a conversation with? (Why?)

PERSONAL VALUES

1. What matters most to you? (What's very important to you?) (What do you really care about?)
2. If you were to single out one thing you really stand for or believe in, what would it be?
3. What would you say are your highest priorities in life?
4. When you're doing something that makes you feel that doing it or feel good about yourself, what does it tend to be?
5. When you have free time, how do you usually spend it?
6. When your mind drifts, or you begin to daydream, is it about anything in particular?
7. When you have extra spending money, what do you usually spend it on?
8. Is there a motto, quote, song, symbol, or bumper sticker that represents something you stand for or believe in?
9. If there were one thing in the world you could change, improve or make a difference in, what would it be?
10. Do you have any heroes, or anyone you admire, look up to, or feel has set an example worth following? (If yes, who and why?)
11. If your house contained everything you own, and it caught fire, but you had time to rush in and retrieve one item, what would you retrieve?
12. What about yourself are you most proud of, or take most pride in doing?
14. How would you define success? (What does "being successful" mean to you?)
15. How do you define happiness? (What would it take for you to feel happy?)
16. What does living a "good life" mean to you?
17. Would you rather be thought of as: (a) smart, (b) wealthy, (c) creative, or (d) caring? Why?
18. What would you like to be said about you in your obituary or at your eulogy?

* Is there anything else about yourself, that I haven't asked, but you think would be interesting or useful for me to know?

COLLEGE EXPECTATIONS, ATTITUDES, & INTERESTS

1. What are your expectations of this college? (What do you hope your experience here will do for you?)
2. What or who do you think will be your most valuable resources and sources of support to help you succeed here?
3. Do you anticipate encountering any challenges or obstacles that might interfere with your success here?
4. When you hear the name of this college, what's the first thing that comes to mind?
5. Right now, how do you feel about being here—positive, negative, neutral? (Why?)
6. Is there anything else about this college, or about yourself, that you think would be interesting or useful for me to know?

COURSE EXPECTATIONS, ATTITUDES, & INTERESTS

1. Why are you taking this course?
2. When you hear “[title of the course]” what’s the first thing that comes to mind?
3. What information or topics do you think will be covered in this course?
4. Have you had any other courses or learning experiences in this subject area?
5. Do you have any course expectations or goals? Is there anything you hope will be covered or discussed in this class?
6. Right now, how do you feel about taking this course—positive, negative, neutral? (Why?)
7. Do you think you will need help with anything in order to succeed in this course?

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Practical Strategies for Unifying Academic Affairs & Student Affairs (Services)

Intentional *Faculty Consciousness-Raising* about the *Educational Purpose* & Value of Student Development Programming

1. *Making professional presentations to faculty on their “turf”* (e.g., during a faculty-senate meeting or new-faculty orientation).
2. Offering *workshops for faculty* under the auspices of the college’s *faculty development program* (e.g., workshops on the social and emotional development of college students, or on the attitudes, values, and interests of today’s first-year students).
3. *Writing articles* for on-campus publications that are *read by faculty* (e.g., faculty newsletter), or publish and disseminate a *student development newsletter* containing information on student affairs’ work intentionally designed to educate or interest the faculty.
4. Intentionally avoiding use of *language* to describe student development programming that may have “*non-academic*” connotations; for example student “activities” (may connote fun ‘n’ games); “extracurricular” (may connote a peripheral frill or side show which is far removed from the institution’s main event or central purpose); student “affairs” or student “personnel” (both of which may connote an administrative/managerial focus—rather than an educational one); student “services” (which may connote a custodial or customer-service function—rather than an educational one).
5. When advertising a student development program and co-curricular event, *intentionally articulating its educational purpose, objective, or outcome*.

Creating a Unified Culture through *Organizational Structures* that Stimulate & Sustain Cross-Divisional Partnerships

1. Capitalize on naturally occurring or already existing *cross-divisional “intersection points”*—i.e., cross-functional areas where Academic and Student Affairs cross paths with respect to program administration or delivery.
For example:
 - * New-student orientation (Student Affairs) and convocation (Academic Affairs)
 - * First-year seminar (“extended” first-year orientation course) taught by faculty and student development professionals who received joint training
 - * Academic advising (intersecting with career counseling and personal counseling)

- * Leadership and community-based learning experiences
 - * Residential life-based academic programming (e.g., “living-learning” experiences such as tutoring or academic advising conducted in student residences)
 - * Transitional programming for graduating students—e.g., sophomore-year courses/programs for graduating 2-year college students who are transferring to 4-year institutions; senior-year seminars/programs for graduating 4-year college students who are transitioning to careers or graduate school.
2. Incorporate *courses* into the curriculum that *integrate student development theory with academic learning*.
Examples: first-year experience course; service-learning courses; senior/sophomore seminar; interdisciplinary courses with experiential components; leadership development course.
 3. Create *structured opportunities* for Academic and Student Affairs professionals to collaborate on campus issues (e.g., cross-functional teams, task forces, ad hoc committees, or joint research projects that address topics of mutual interest and concern—such as accreditation, assessment, and/or student retention).
 4. Arrange *office locations* that intentionally place faculty members and Student Affairs professionals *within physical proximity of each other*—to increase the likelihood of dialogue, interaction, and potential collaboration.
 5. Organize *discussion groups or “critical-moment learning teams”* of faculty and student affairs professionals after a high-impact event or critical incident has taken place on campus (e.g., racial incident or student suicide).
 6. Arrange for *temporary exchanges* of Academic & Student Affairs professionals who are willing to “crossover” to another division of the college and gain an expanded perspective (e.g., via reassigned time, internal sabbatical, or temporary positional exchange).
 7. Create *administrative positions* that involve *integration of* Academic & Student Affairs responsibilities (e.g., Director of the First-Year Experience; Coordinator of Student Success; Dean of Student Learning).

Unifying Campus Culture by Designing Comparable Educational *Materials & Artifacts*

- * **Creating co-curricular programs and products that *parallel* those found in the formal curriculum.**

For example:

1. Co-Curricular *Syllabus* (comparable to the traditional course syllabus) that provides a one-page outline of the co-curricular event's learning objectives, content, and process of educational delivery.
2. Co-Curricular *Assessment*—e.g., students write a one-minute paper after experiencing a co-curricular program or event, which asks them to evaluate the experience in terms of how it contributed to their learning or development—particularly with respect to its intended educational outcome(s).
[For more information on the one-minute paper, see Appendix A, p. 8.]
3. Co-Curricular *Schedule* (comparable to the schedule of classes issued each term) that contains the titles, dates, times, and brief descriptions of co-curricular events to be offered during the semester.
Note: Ideally, a co-curricular events schedule would be attached to, and included as a section within the traditional schedule of classes.
4. Co-Curricular *Catalogue* (comparable to the traditional course catalogue) that contains:
 - a mission statement for the co-curriculum
 - educational goals and objectives of the co-curriculum
 - annually offered programs and activities
 - names and educational background of student development and student-service professionals.Note: Ideally, a co-curricular catalogue would be incorporated within the traditional college catalogue as a special, clearly identifiable subsection.
5. Co-Curricular *Honors Program* (comparable to the academic honors program) that recognizes students who make outstanding contributions to student life or community life outside the classroom—e.g., campus involvement/leadership or service to the local community.
6. Co-Curricular or Student Development *Transcript* (comparable to the traditional registrar-issued transcript of completed courses) that formally lists and documents students' co-curricular achievements—both for personal recognition and for future use by students when they apply to career positions or graduate schools.
Note: Ideally, a co-curricular transcript would be incorporated within or appended to the student's course transcript.

Creating a Collaborative Campus Culture through Intentional Faculty Recruitment, Orientation, Development, & Reward Strategies

1. Intentionally *recruit and select* faculty members who have an interest in and

commitment to student development (e.g., via intentional position announcements, interview questions, and hiring criteria).

2. During *new-faculty orientation*, alert faculty to professional advancement opportunities that involve partnerships with Student Affairs.
3. Include workshops on partnering with Student Affairs as a component of *faculty development* programming.

Examples:

- * Student Development professionals make professional presentations to faculty on their “turf.” For instance, some faculty development programming or a piece of new-faculty orientation is devoted to providing faculty with information on student development theories and their compatibility with learning theories.
 - * Student Life professionals create a newsletter for faculty that includes information on student development research, theory and practice.
4. Provide prestigious *awards* to faculty for contributions to student life (e.g., a “student service award” presented to a faculty member at graduation, convocation, or on “awards night”).
 5. Create *incentives* for faculty to participate in campus initiatives that involve collaboration between Academic and Student affairs (e.g., mini-grants, travel funds, campus space).
 6. Weigh faculty collaboration with Student Affairs seriously in the *faculty retention-and-promotion* process (e.g., as a heavily weighted form of faculty “service”).

Human Relations & Networking: Creating Opportunities for Informal, Cross-Divisional Interaction

1. *Dining Invitations*
2. *Conference Invitations*
3. *Attending faculty-sponsored events* (e.g., faculty development workshops, faculty lectures, or faculty forums).

4. *Becoming familiar with the professional and scholarly interests* of individual faculty members so that they may be selectively asked to *contribute their expertise* to collaborative projects (e.g., research studies; grant proposals).
5. *Becoming familiar with faculty members' avocational interests* so that they may be *selectively targeted and recruited* for co-curricular partnerships that may be especially interesting or appealing to them (e.g., a bicycling professor may be interested in sponsoring a student cycling club).
6. *Inviting faculty to make presentations on your "turf"* (e.g., invite them to present their research at your staff meetings).

