Student Workbook Name:

NAVIGATE

Exploring College and Careers

Federal Reserve Bank of Dallas

NAVIGATE: Exploring College and Careers
is produced by the Economic Education division, Communications & Outreach Department, Federal Reserve Bank of Dallas.

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NAVIGATE: Exploring College and Careers was inspired by *Let's Talk About College*, a program developed by the Federal Reserve Bank of Boston and the Citizens School.

NAVIGATE

Exploring College and Careers

Welcome to **NAVIGATE:** Exploring College and Careers.

This handbook is designed to be used by students as they explore careers and the educational requirements necessary to excel in the workforce. Students will:

- examine various careers and educational requirements;
- evaluate different educational opportunities after high school;
- identify academic choices and extracurricular activities that will enhance their application;
- research the cost of postsecondary education;
- explore types of financial aid;
- imagine a path to success.

The exploration and investigation of careers and college will continue through students' high school years. Many students may not be familiar with the application process and admission requirements of education after high school. **NAVIGATE** provides information to begin preparing for this journey. Financial barriers to education can be overcome through use of financial aid that is available from public and private sources. Students are encouraged to work closely with teachers, career centers and school counselors throughout their high school years.

With planning, the goal of postsecondary education is attainable for all.

Unit 1 Exploring Careers

Education pays! Adults with more education can expect to earn higher wages.

Of the hundreds of careers that you could pursue, many will require education or certification beyond high school graduation.

Career Path ▶ Registered Nurse/Nurse Anesthetist

I have always wanted to pursue a career in medicine. I earned a bachelor's degree in nursing and was hired as soon as I graduated. I enjoy the flexibility of my career. I work long hours, but I also have three-day weekends. I enjoy the time off and like to spend it with my friends and family. Two years ago, I decided to go back to school to get my master's degree and become a certified registered nurse anesthetist (CRNA). It was the best decision of my career.

Median Wage: $96,460
Expected Job Growth 2012–2020: 31%

Think About This

In 2013, workers with a bachelor's degree made $457 more every week than high school graduates. **That's more than a million dollars in a typical working life!**

Calculated from www.bls.gov/emp/ep_chart_001.htm

Human capital is...

My Top Five

List five skills or talents that you already have. These might include your favorite subject at school or a hobby that you are passionate about.

1.

2.

3.

4.

5.

The Road Ahead

Now list three ways you could develop your knowledge, skills and talents.

1.

2.

3.

Explore: Careers

Click here to clear ALL selections

Architecture and Engineering

- ◯ Aerospace Engineers
- ◯ Industrial Engineers
- ◯ Architects
- ◯ Surveyors
- ◯ Drafters

Clear selections

Arts and Design

- ◯ Fashion Designers
- ◯ Graphic Designers
- ◯ Multimedia Artists and Animators

Clear selections

Building and Grounds Cleaning

- ◯ Janitors and Building Workers
- ◯ Pest Control Workers

Clear selections

Business and Financial

- ◯ Accountants
- ◯ Logisticians
- ◯ Financial Analysts
- ◯ Management Analysts
- ◯ Human Resources Specialists

Clear selections

Community and Social Service

- ◯ Mental Health Counselors
- ◯ School and Career Counselors
- ◯ Probation Officers
- ◯ Social Workers

Clear selections

Computer and Information Technology

- ◯ Computer Systems Analysts
- ◯ Database Administrators
- ◯ Software Developers
- ◯ Web Developers

Clear selections

Construction and Extraction

- ◯ Carpenters
- ◯ Plumbers
- ◯ Electricians
- ◯ Steel Workers

Clear selections

Education, Training and Library

- ◯ Archivists, Curators and Museum Workers
- ◯ Librarians
- ◯ Teachers
- ◯ Instructional Coordinators

Clear selections

Entertainment and Sports

- ◯ Actors
- ◯ Musicians and Singers
- ◯ Coaches and Scouts
- ◯ Producers and Directors

Clear selections

Farming, Fishing and Forestry

- ◯ Agricultural Workers
- ◯ Forest and Conservation Workers
- ◯ Fishers

Clear selections

Food Preparation and Serving

- ◯ Chefs
- ◯ Food Preparation Workers

Clear selections

Health Care

- ◯ Audiologists
- ◯ Physician Assistants
- ◯ Dentists
- ◯ EMTs and Paramedics
- ◯ Radiologic or MRI Technologists
- ◯ Pharmacists
- ◯ Surgical Technologists
- ◯ Physical Therapists
- ◯ Veterinarians

Clear selections

Installation, Maintenance and Repair

- ◯ Aircraft and Avionics Mechanics
- ◯ Diesel Mechanics
- ◯ Medical Equipment Repairers
- ◯ Automotive Service Technicians
- ◯ Heating and Air-Conditioning Mechanics and Installers

Clear selections

More options next page ➤

Legal

- Court Reporters
- Lawyers
- Judges and Hearing Officers
- Paralegals and Legal Assistants

Clear selections

Life, Physical and Social Science

- Agricultural and Food Scientists
- Economists
- Historians
- Anthropologists and Archaeologists
- Medical Scientists
- Chemists and Materials Scientists
- Political Scientists
- Psychologists

Clear selections

Management

- Administrative Services Managers
- Financial Managers
- Compensation and Benefits Managers
- Preschool and Child Care Center Directors
- Construction Managers
- Sales Managers

Clear selections

Math

- Actuaries
- Operations Research Analysts
- Mathematicians
- Statisticians

Clear selections

Media and Communication

- Announcers
- Photographers
- Editors
- Public Relations Specialists
- Interpreters and Translators
- Writers and Authors

Clear selections

Military

- Army
- Air Force
- Navy
- Marines

Clear selections

Office and Administrative Support

- Bookkeeping, Accounting, and Auditing Clerks
- Postal Service Workers
- Desktop Publishers
- Receptionists
- Financial Clerks
- Tellers

Clear selections

Personal Care and Service

- Animal Care and Service Workers
- Fitness Trainers and Instructors
- Barbers, Hairdressers and Cosmetologists
- Funeral Service Occupations
- Childcare Workers
- Recreation Workers

Clear selections

Production

- Assemblers and Fabricators
- Welders, Cutters Solderers and Brazers
- Machinists and Tool and Die Workers
- Woodworkers
- Quality Control Inspectors

Clear selections

Protective Service

- Correctional Officers
- Police and Detectives
- Firefighters
- Security Guards and Gaming Surveillance Officers

Clear selections

Sales

- Cashiers
- Securities, Commodities and Financial
- Insurance Sales Agents
- Travel Agents
- Real Estate Brokers and Sales Agents

Clear selections

Transportation and Material Moving

- Air Traffic Controllers
- Heavy and Tractor-Trailer Truck Drivers
- Airline and Commercial Pilots
- Railroad Occupations
- Bus Drivers
- Water Transportation Occupations
- Delivery Truck Drivers and Driver/Sales Workers

Clear selections

Other:

You can learn about many different careers by using the Occupational Outlook Handbook from the Bureau of Labor Statistics. Every career profile describes the job, the work environment, educational requirements and median pay. **Find out more at www.bls.gov/ooh.**

Explore: Your Career

Describe where you work:

My career choice:

Explain what you do:

How much education will you need?

- ◯ High school diploma or GED
- ◯ Postsecondary non-degree award (certification)
- ◯ Associate degree
- ◯ Bachelor's degree
- ◯ Master's degree
- ◯ Doctoral or professional degree

Clear Selections

How much will you earn?

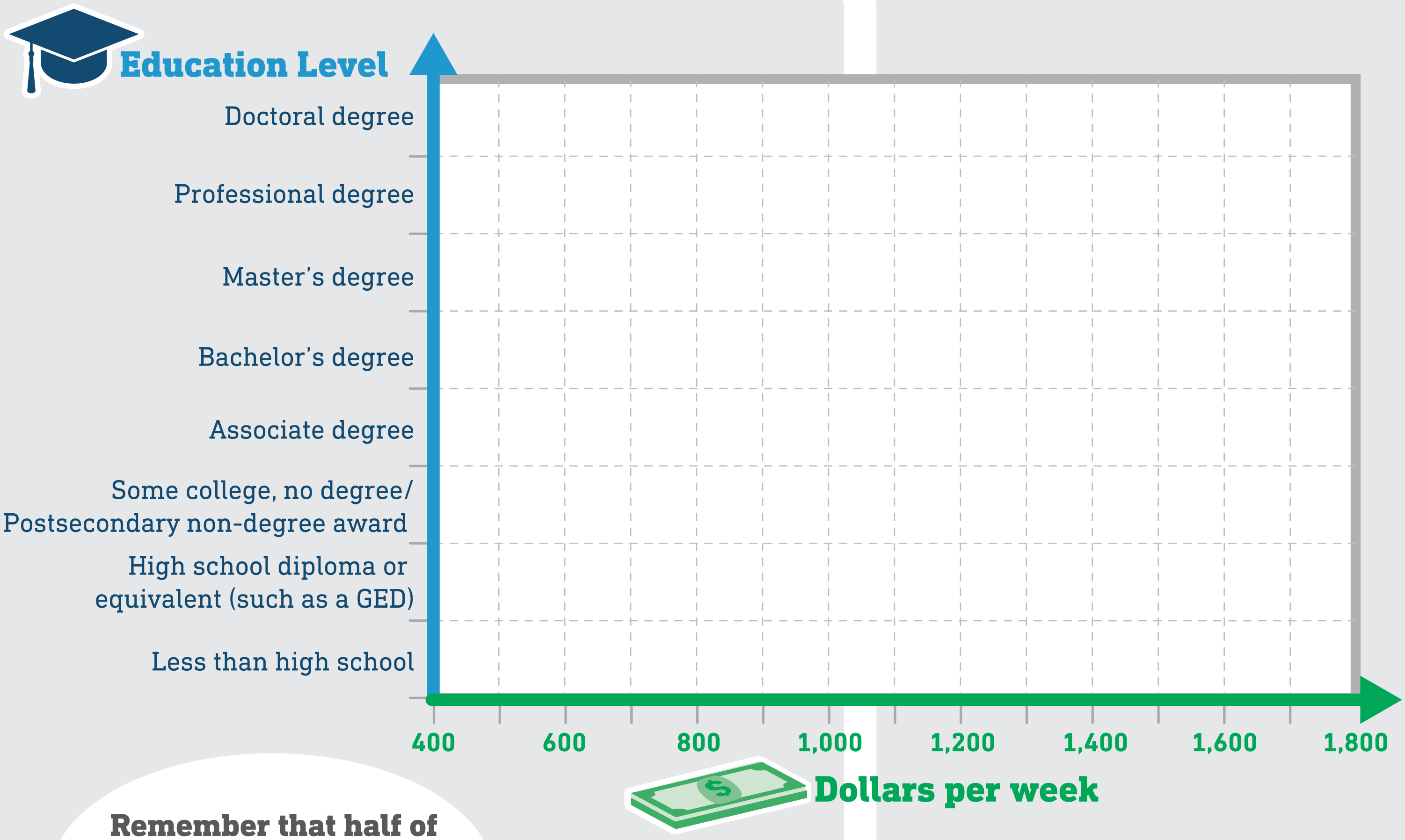
Yearly:

$

Weekly:

$

Explore: Education and Earnings



Remember that half of all workers earn more than the median salary and half earn less.

Education and Earnings

1. Is the median salary of the career you researched higher or lower than the median salary of other careers that require a similar level of education?

2. Why do you think that the career you researched pays more or less than the median?

3. Does this change the way you think about the career?

Unit 2 What About College?

There are more than 4,500 colleges in the United States. Every college is unique and meets the needs of its students.

From cost to class size, from student body to extracurricular activities, there are advantages and disadvantages to every college.

Career Path

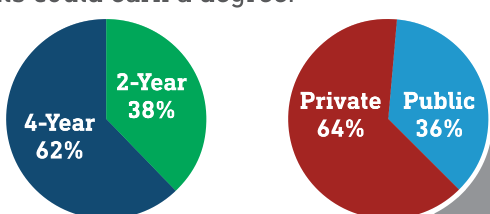
Heating, Ventilation and Air Conditioning (HVAC)

As a senior in high school, I didn't know exactly what an HVAC tech was, but after talking with my career counselor, this sounded like a great fit for me. I like working with my hands, solving problems and fixing machinery. The community college offers a 16-month program that prepared me for my state exam and certification. Every day my job is different—new locations, new problems. I enjoy the challenge and one day hope to open my own business.

Median Wage: $43,640
Expected Job Growth 2012–2020: 21%

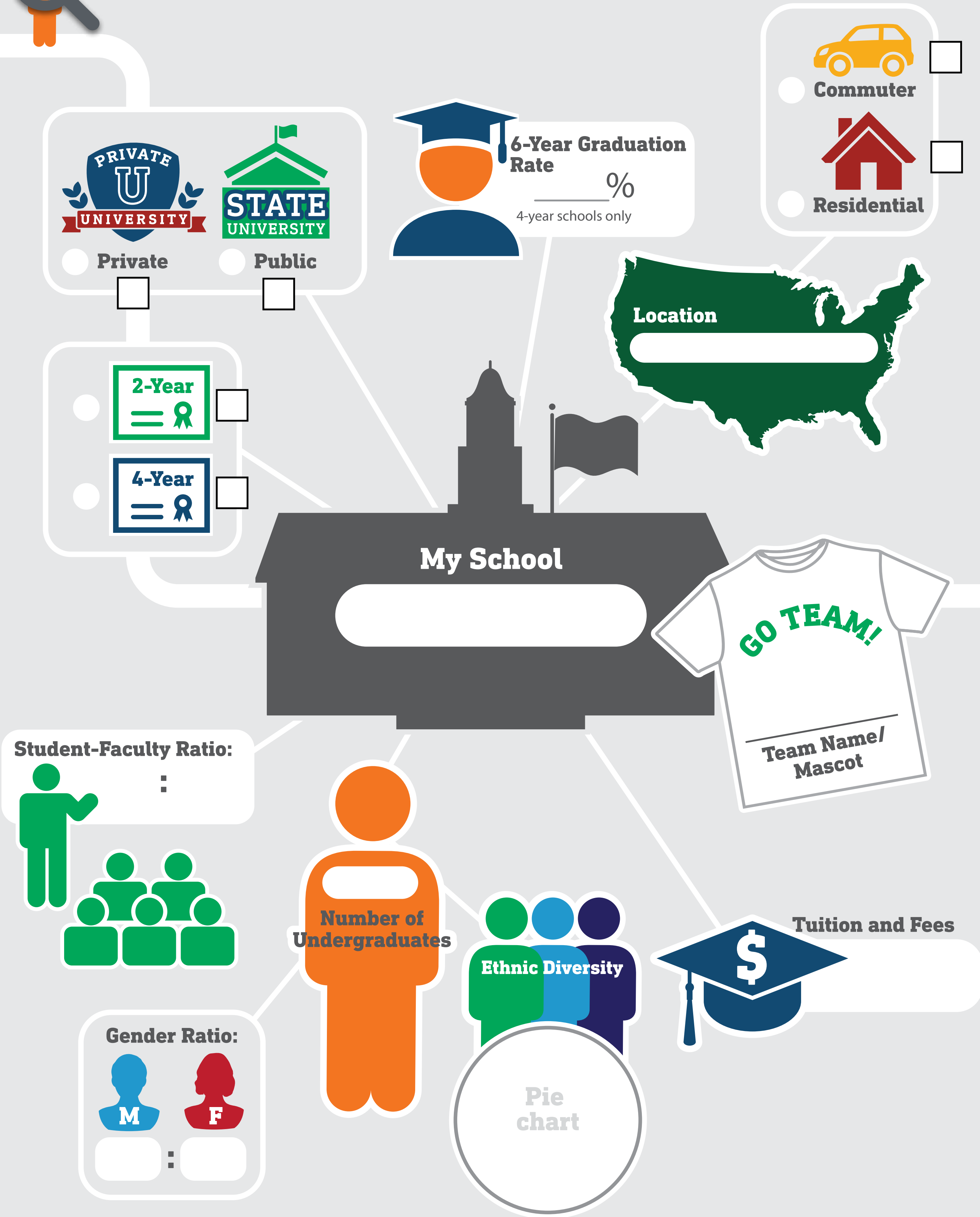
Think About This

In 2011, there were 4,599 schools in the U.S. where students could earn a degree.



http://nces.ed.gov/programs/digest/d12/tables/dt12_005.asp

Explore: My College



Gallery Walk Notes

Private University

Common Characteristics	Advantages	Disadvantages

Public University

Common Characteristics	Advantages	Disadvantages

Community College

Common Characteristics	Advantages	Disadvantages

Explore: What I Learned About…

Private University

Advantages

Disadvantages

Public University

Advantages

Disadvantages

Community College

Advantages

Disadvantages

Unit 3 How Do I Get In?

Your grades matter, and so do the courses that you take. Colleges look at everything. They even consider your scores on national tests.

Get involved! Find something you love. Extracurricular activities—both in and out of school—are an important part of your college application.

Career Path: Teacher

I love science, and as a high school science teacher I get to share that passion every day. I attended an out-of-state university and double majored in science and education. My teaching career is everything I hoped it would be. To earn additional income, I also coach athletics both at school and competitively during the summer.

Median Wage: $55,050
Expected Job Growth 2012–2020: 6%

Think About This

How do college-bound high school seniors spend at least one hour during a typical week?

Exercising or playing sports: 86%

Volunteering: 55%

Working: 54%

Student clubs or groups: 41%

http://www.heri.ucla.edu/tfsPublications/php

Explore: Your Path to College

Track Your Extracurricular Activities at School

Test Scores

1. A B C E

2. A C D E

A B C D E

Achievements

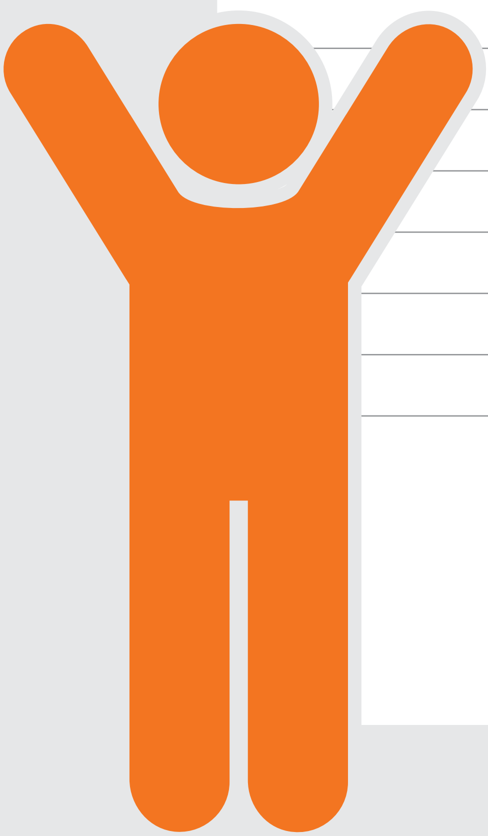
References

Other

Track Your Extracurricular Activities Outside of School

You've been accepted!

Dear ______________________________,



Sincerely,

Dee Gree

Ms. Dee Gree
Office of Admissions

Unit 4 How Much Does College Cost?

Besides tuition and fees, the cost of continuing your education after high school includes books and supplies, room and board, personal expenses and transportation.

Weigh your choices! The cost of attending college varies widely among schools.

Career Path: Phlebotomist

As a phlebotomist, I meet lots of interesting people and serve an important role in the medical community. I earned my certificate through a program at my local community college. I completed my program in three months and found a job at our county hospital. Recently I applied for and got a position working with our mobile blood drive team. We travel to locations around the city and provide opportunities for individuals to donate blood.

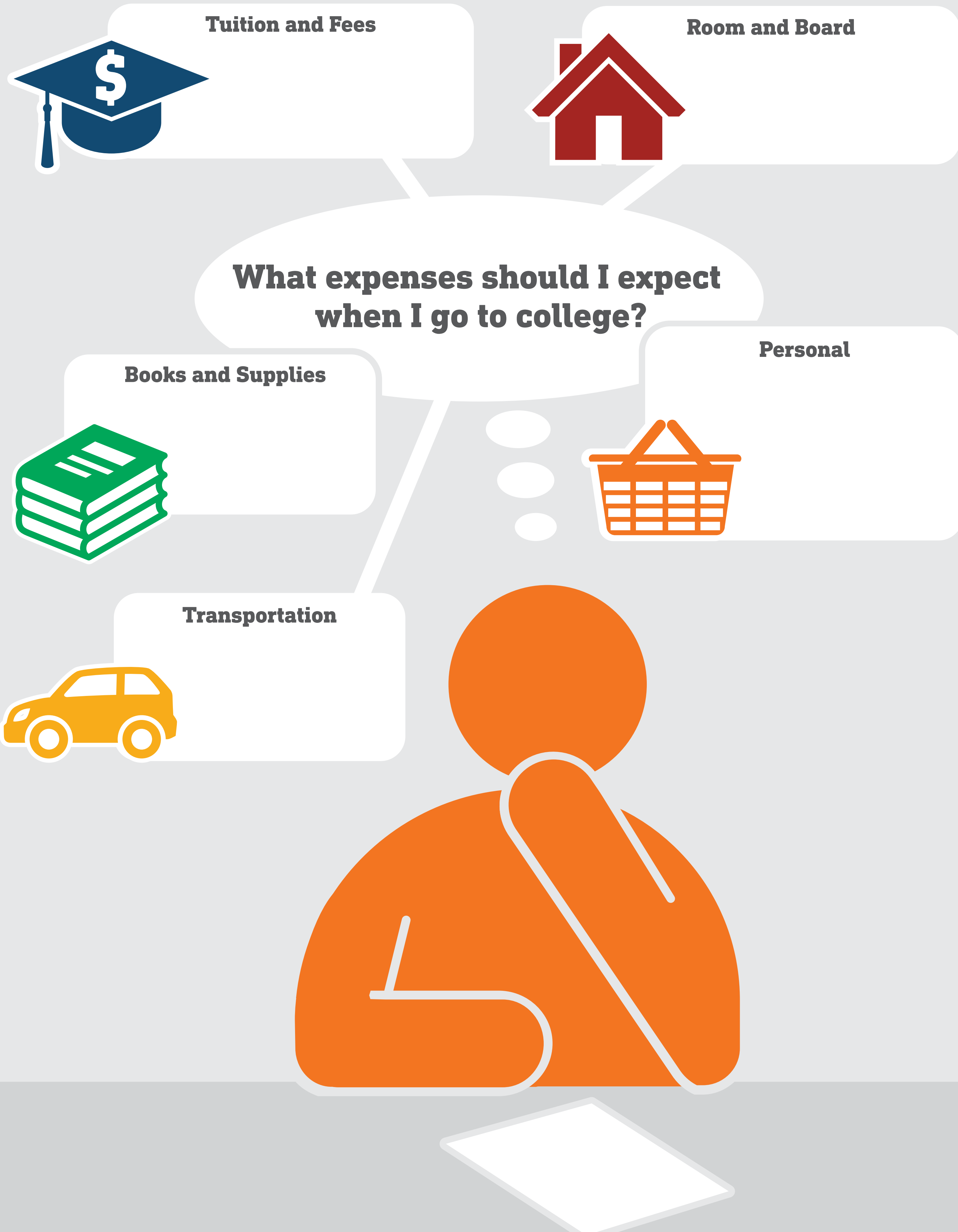
Median Wage: $29,730
Expected Job Growth 2012–2020: 27%

Think About This

2014–15 Tuition and Fees

2-Year Community College	$3,347
4-Year Public University (In State)	$9,139
4-Year Public University (Out-of-State)	$22,958
4-Year Private Nonprofit University	$31,231

https://trends.collegeboard.org/college-pricing


Tuition and Fees
Room and Board
What expenses should I expect when I go to college?
Books and Supplies
Personal
Transportation

Explore: College Cost

In-State 4-Year Public University

STATE UNIVERSITY

Dollar amount per year	% of total cost
Tuition and Fees $	%
Room and Board $	%
Books and Supplies $	%
Personal $	%
Transportation $	%
Total $	100%

Out-of-State 4-Year Public University

Dollar amount per year	% of total cost
Tuition and Fees $	%
Room and Board $	%
Books and Supplies $	%
Personal $	%
Transportation $	%
Total $	100%

PRIVATE U UNIVERSITY

4-Year Private University

	Dollar amount per year	% of total cost
Tuition and Fees	$	%
Room and Board	$	%
Books and Supplies	$	%
Personal	$	%
Transportation	$	%
Total	$	100%

COMMUNITY COLLEGE

2-Year Community or Junior College

	Dollar amount per year	% of total cost
Tuition and Fees	$	%
Room and Board	$	%
Books and Supplies	$	%
Personal	$	%
Transportation	$	%
Total	$	100%

Explore: College Life on a Budget

Personal Expenses

National Average

$2,105 per year*

or

$234 per month

(*School year = 9 months*)

Create a Budget

Some possible expenses that are included in this budget are listed below. They currently total $725. You must reduce the expenditures to $234 or plan to get a part-time job.

Expense	Current Amount	Change	New Amount	Explanation
Dining out	$120			
Student tickets to athletic events	$60			
Snacks for dorm room	$100			
Clothes	$100			
Fraternity/ sorority dues	$125			
Movies	$45			
Cell phone	$60			
Personal care (haircut, toiletries, etc.)	$75			
Laundry	$40			

Total Expenses

$725

Change ______

New Amount ______

Was working with this budget difficult? Some students work part time while they are enrolled in school. How would your choices change if you had an extra $300 income from a part-time job each month?

* Source: The College Board, Annual Survey of College, October 2013

Practice Creating a Budget

Practice Makes Perfect

Making a budget is a skill that will last a lifetime. Use this table to start today!

1 **Write down your income.** It might be an allowance from your parents or money that you earn from a job.

2 **Record the money that you spend.** Include everything from downloads to snacks to clothing and more expensive items.

3 **Remember that when your income is greater than your expenses, you can save money for a future goal.** Look for places to reduce your spending and start saving!

My Budget

	Current Income
Income Source:	$
Total Income	$
	Expenses
	$
	$
	$
	$
	$
	$
	$
	$
	$
Total Expenses	$
Available to Save	$

Unit 5 Paying for College

Money to help pay for college is available. Government, schools and even private sources all provide financial aid to students. Often, completing the FAFSA is the first step.

Know the difference! Scholarships and grants do not have to be paid back. Loans must be paid back with interest.

Career Path — Civil Engineer

The engineering project I am most proud of is the renovation and expansion our company provided for the airport. I earned a four-year degree in engineering from a state college and found a job right out of school. While most of my time is spent indoors, it is always exciting to go on-site to check on projects I am managing. I use the skills I learned in college every day, especially the math and physics. The most surprising part of my job is how important my writing skills are, since a big part of my job involves communication—reporting and presenting data to others.

Median Wage: $79,340
Expected Job Growth 2012–2020: 20%

Think About This

70.7%

of undergraduate students receive some type of financial aid.

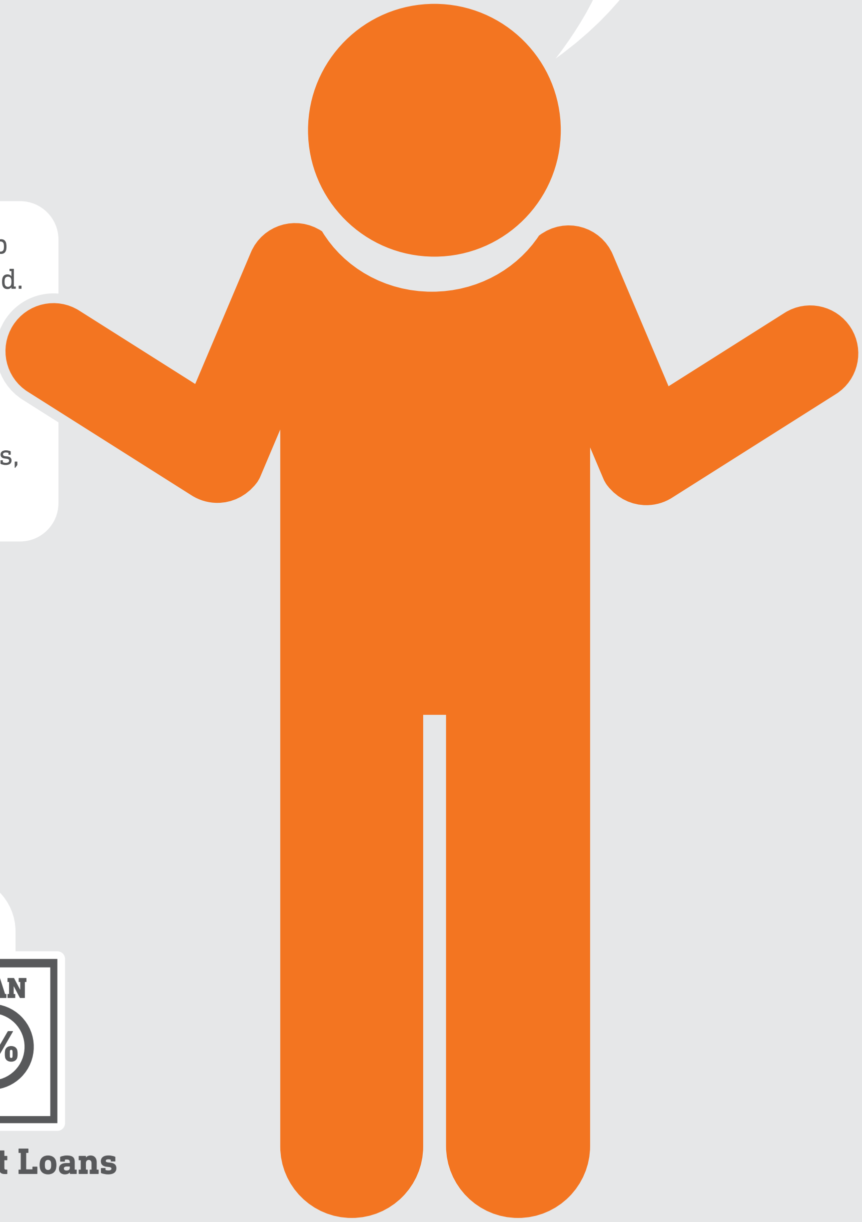
http://nces.ed.gov/programs/digest/d13/tables/dt13_331.10.asp

How do I pay for college?

What is financial aid?

You and your family may have already started saving for your education. Even saving a small amount can make a difference in your ability to afford college.

More than 70% of students get some type of help to pay for college. This help is called financial aid. To receive most types of financial aid, you and your parents will have to fill out the **Free Application for Federal Student Aid (FAFSA)** during your senior year. In your FAFSA, you will provide information about your family's finances, like income, savings, debts and assets.



There are three main types of financial aid:

Gift Aid

Work Study

Student Loans

Gift Aid

Gift aid is money that does not have to be repaid. It can be in the form of either grants or scholarships.

Grants are often based on financial need. Grants can come from the government, your college or a private or nonprofit organization. You might have to pay back part or all of a grant if you don't follow the grant's requirements. The FAFSA is the application for all federal grants.

Scholarships come in many forms. Some are merit-based because they depend on things like grades, volunteer work, community involvement, athletics, music, etc. Others are need-based because they are determined by your family's income. There are scholarships based on other criteria—military service, where you live, your ethnicity, whether your parents went to college or not, among others.

Scholarships come from many sources. Your college will probably offer many types. Other scholarships are offered by companies, nonprofits, religious groups, and various clubs and organizations. It takes some research to find these, and they will require a separate application.

A scholarship might pay the entire cost of your tuition, or it might be a one-time award of a few hundred dollars. It's worth applying for scholarships because they reduce the cost of your education.

Work Study

Work-study programs provide you with a job while you're enrolled in school. As with grants, eligibility is determined by the FAFSA. You are paid directly and may use work-study money to pay for school and other expenses.

Student Loans

Unlike gift aid and work study, student loans have to be repaid with interest. If you decide to take out a loan, make sure you understand who is making the loan and the terms and conditions of the loan. Student loans can come from the federal government or from private sources. Loans made by the federal government usually offer borrowers lower interest rates and have more flexible repayment options, like not making payments while you are enrolled in school. Private loans are available from banks or credit unions. It is important to understand the interest rate, fees and other features of any loan that you are offered.

Your school can help!

Remember, most financial aid begins with the FAFSA. Researching and applying for financial aid can take some time and effort, but the rewards can be worth it. Your counselor or teachers can help you explore your options. There's never a reason to pay someone to find financial aid for you or to help you complete or submit the FAFSA.

Explore: Paying for College

Fill in the Blanks

1. ____________________ are often based on financial need and do not need to be repaid unless you do not complete the requirements.

2. ____________________ are a type of gift aid that are awarded based on merit, need or other criteria.

3. ____________________ is a type of aid that allows a student to earn money while enrolled in school that can be used to pay for educational and other expenses.

4. ____________________ are a type of financial aid that must be repaid with interest.

5. The ____________________ is a free application for financial aid. It is required for all types of aid from the U.S. government and used by many other financial aid providers.

6. The money that you or your family have earned and not spent is called __________________. The money can be used for educational and other expenses.

Create an Information Web

Use the answers from above as key words and construct your web.

Unit 6 Future Paths

Many careers require education beyond high school. There are many choices for that training.

Your application depends on both academics and extracurricular activities.

Education is not free. There are many costs associated with attending college, but help is available.

Career Path: Business Logistician

My job is always a challenge, whether I'm making sure resources arrive on time, checking that departments have the materials they need to keep production moving or ensuring that the product leaves the plant in a timely manner. I earned a four-year degree in logistics from a private university and was hired by a company I had interned with during my summer break. I enjoy the fast pace and opportunity to interact with different people during the day.

Median Wage: $72,780
Expected Job Growth 2012–2020: 22%

Think About This

Studies show that, besides having a higher median salary and a lower unemployment rate, college graduates:

- ✓ are more satisfied in their jobs
- ✓ are more likely to exercise
- ✓ are less likely to smoke and less likely to be obese
- ✓ are more likely to be civically involved and vote

http://trends.collegeboard.org/education-pays
http://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report-022714.pdf

Explore: Planning Your Future

You can start today preparing for a career. The courses that you take in high school, the clubs that you join, the activities that you pursue and the experiences that you have can all develop your human capital that will make you a more valuable employee.

Pick a career from the cards and read the description. Think about some things that you could do in high school to prepare for that career.

Courses

Extracurricular
at School

YHS
YOUR HIGH SCHOOL

Extracurricular
Outside of School

References

Imagine that you are 25 years old working in the career on your card. You receive this letter inviting you to write a personal narrative that will be published by your high school.

YHS
YOUR HIGH SCHOOL

Dear Graduate,

Our student council is excited to offer incoming freshmen a book about recent graduates from our high school. We are hoping that the book will inspire them to continue their education after high school and inform them of the steps that students from our school took to achieve that goal.

As a successful graduate of our high school, would you write an essay for the book describing your path through high school and beyond? Please address these questions in your essay.

- What did you do in high school to prepare for your career?
- What type of education did you pursue after high school? How did you pick the school? What did you study?
- What challenges did you face? How did you overcome them?

We look forward to sharing with our incoming students the details about the choices that contributed to your success.

Sincerely,

The Student Council President

Personal Narrative Questions

1. What did you do in high school to prepare for your career?

2. What type of education did you pursue after high school? How did you pick the school? What did you study?

3. What challenges did you face? How did you overcome them?

My path to my career as a ______________________________

Glossary

Admission process: the application and evaluation process a prospective student goes through to be accepted to a school.

Advanced Placement (AP): a program of college-level courses taught in high schools to prepare students for Advanced Placement (AP) tests. These tests, administered by the College Board, provide the opportunity for students to earn college credit.

Associate degree: a degree awarded by community colleges, technical schools and some universities after completion of a program of approximately 60 credit hours (also called a two-year degree).

Bachelor's degree: a degree awarded by a college or university after completion of an academic program of approximately 120 credit hours (sometimes called a four-year degree).

Career: a professional field or occupation that one trains for or undertakes as an intentional path.

Class rank: a measure of a student's grades compared to the other students in the class.

College: an institution that offers classes and instruction leading to a bachelor's degree and/or vocational training and certification.

Community college: a two-year school that offers associate degrees and workforce certification programs (sometimes called a junior college).

Commuter student: student who lives off campus and travels to the school for courses and other activities.

Credit-by-exam: tests that provide the opportunity to earn college or high school credit by passing a standardized test without taking a course.

Dual-credit courses: high school courses that count toward high school graduation requirements and earn college credit hours.

Fees: see tuition and fees.

Free Application for Federal Student Aid (FAFSA): an application that includes financial information about a student and his or her family and is used to determine the student's eligibility for financial aid.

GED: a set of tests that allow people who did not graduate from high school to obtain high school credentials.

GPA (grade point average): an average of a student's grades in all classes taken, often reported on a four-point scale.

Human capital: knowledge, talent, experience and skills that people possess.

In-state tuition: the tuition paid by students who reside in the same state as the college or university they attend.

International Baccalaureate Program (IB Program): a program of challenging high school classes with a global focus. Courses include examinations that may allow a student to earn college credit.

Junior college: see community college.

Liberal arts college: an undergraduate school that awards degrees in areas such as English, history, economics, foreign languages, math and science.

Major: the academic discipline in which a student takes most of his or her classes.

Master's degree: a one- to two-year graduate degree that is earned after a bachelor's degree. The field of study can be an academic discipline or professional field.

Out-of-state tuition: the tuition paid by students who reside in a different state from the college or university they attend.

Private school: a college or university that is administered by a private organization and receives the majority of its funding from tuition, fees and donations to the school.

Professional degree: a graduate-level degree that provides training in specific skills related to a career, such as medicine or law.

Public school: a college or university that is administered by a local or state government and receives funding from government sources.

Religious affiliation: the historic or current association of a college with a religious faith. Some of these institutions may require specific religious instruction.

Residential school: an educational institution that provides housing for students.

Room and board: the cost of living and eating on campus.

Six-year graduation rate: the portion of students at a college or university who complete a bachelor's degree within six years.

Student-faculty ratio: the number of students per member of the faculty.

Technical school (vocational school): post-high-school institutions that provide technical training. Programs sometimes lead to certifications or licenses.

Transcript: an official record of a student's grades.

Tuition and fees: cost of instruction and facility use (classes) at an educational institution. Tuition can be quoted as a cost per credit hour or as a flat rate for a range of credit hours. Fees include general fees, such as for use of libraries and for student activities, and may include course-specific costs, such as lab fees.

Undergraduate classes: classes offered to students who have not earned a college degree.

University: an institution usually made up of multiple colleges (such as liberal arts, medical or business) that offers bachelor's, master's and doctoral degrees.

Vocational school: see technical school.

Weighted GPA: a grade point average (GPA) that is calculated with extra points added to the grade value for honors or advanced classes.

Track Your Achievements

Award or Recognition	Organization	Date	Contact or Reference	Brief Description

Federal Reserve Bank of Dallas
2200 N. Pearl Street
Dallas, TX 75201
214.922.5270
800.333.4460, ext. 5270
dal.econed@dal.frb.org
dallasfed.org/educate

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18-1279