

Introduction to Career Pathways and Contextualized Instruction

Career Pathways

A career pathway consists of a connected series of educational and training programs and services designed to prepare adults for employment and advancement in high-demand occupations. Each career pathway acts as a road map that provides individuals with career opportunities.

Career pathways integrate academic and career and technical skills in order for individuals to be successful in today's global economy.

How do career pathways connect with your GED® preparatory program?

No longer is a GED® diploma an ending point for students. Rather, this important credential opens the doors for our students to enter the career of their choice.

Some GED® programs act as “bridge” programs. A bridge program is an essential component in a career pathway. Research indicates that the most effective way to help adults improve academic skills is to teach these skills in the context of training for jobs, preparing for employment,

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*“Choose a job you
love, and you’ll never
have to work a day in
your life.”*

Confucius

transitioning to postsecondary education, or some other activity that is related to skills necessary for today's world.

Bridge programs:

- Integrate academic competencies necessary to succeed in postsecondary education and training with real-world experiences that lead to career advancement
- Emphasize the basics of communication, problem-solving and critical-thinking skills, mathematical reasoning, technology applications, workplace competencies, and technical fundamentals taught in the context of problems and situations drawn from the workplace and postsecondary classrooms
- Emphasize learning by doing through projects, teamwork, simulations, and labs
- Expose students to opportunities and requirements of employment and education in fields of importance to local economies through career and college exploration and planning
- Integrate instructional methods and technologies appropriate for adult learners
- Offer support services

The major distinguishing factor between a bridge program and a traditional GED® preparatory program is the dual focus on preparation for postsecondary learning and career access and advancement.

Developing a GED® bridge program requires that you integrate the academic skills necessary for success with an identified career pathway. This process is being implemented throughout Florida. Remember, developing any new program is a process and requires a step-by-step plan with collaboration and support.

The important thing to remember is that most career pathways require a high school credential. As a GED® instructor, an important part of developing your program is ensuring that students relate to the concepts and skills being taught and are able to transfer these concepts and skills to different situations as they transition to postsecondary education and the workplace.



Resources

The following are resources on career pathways:

- Adult Education Career Pathways
<http://www.fldoe.org/workforce/AdultEd/pathways.asp>
- Hull, D. and Hinckley, R. *Adult career pathways*. (2007). CORD Communications: Waco, TX

Contextualized Instruction

What is the best way to convey the many concepts that are taught in the GED® classroom so that all students can use and retain that information? How can you effectively communicate with students who wonder “Why do I need to know this?” How can you open the minds of a diverse student population so that every student can learn the concepts and techniques that will open doors of opportunity throughout their lives? These are the challenges that instructors in adult education encounter every day.

Many of our students are unable to make connections between what they are learning and how that knowledge will be used. This is often because the way that they process information and their motivation for learning are not connected to traditional methods of classroom teaching. Many have a difficult time understanding academic concepts (such as math concepts) as they are commonly taught (that is, using an abstract, lecture method). Our students must be able to understand these concepts as they relate to their lives and the workplace. Traditionally, students have been expected to make these connections on their own. However, contextual learning is a proven concept that helps students make these connections within the classroom.

What is contextual teaching and learning? It is simply a teaching and learning system that helps instructors relate subject matter content to real-world situations and motivates students to make connections between knowledge and its applications to their lives as family members, citizens, and workers, and to engage in the hard work that learning requires.

In a contextualized classroom, students discover meaningful relationships between abstract ideas and practical applications in the context of the real world; concepts are internalized through the process of discovering, reinforcing, and relating. For example, a science class might learn basic scientific concepts by studying the components of a nutritional diet or the spread of a disease in a community.

When developing a system of contextualized instruction, it is important to remember that effective contextualized instruction is based on:

- high expectations of student achievement;
- development and utilization of authentic methods of assessment;
- demanding courses of study;
- providing abundant and varied materials to read and discuss;
- promotion of new forms of student activity in and out of the classroom; and
- re-examination of the classroom environment to ensure that instruction is embedded in a genuine context rather than the decontextualized structure of traditional environments.³

³ What is contextualized learning? Nebraska Institute for the Study of Adult Literacy. Retrieved from the World Wide Web at: <http://literacy.kent.edu/~nebraska/curric/ttim1/art5.html>

Research on Contextualized Learning

Although a major trend in the past twenty years, contextual learning is not new. Contextual approaches to teaching and learning, and efforts to attach meaningfulness to subject matter can be found in the education theories of John Dewey (1859-1952). Dewey stressed experiential modes of learning, theorizing that learning results as we strive to make sense of our experiences.

Effective instructors have always placed a heavy emphasis on the search for meaning and understanding. Educators have often motivated their students by relating what was being learned to the realities of daily life and have encouraged them to learn through hands-on and practical approaches. Although diverse ideological and pedagogical traditions exist, many believe that true learning exists only when contextual principles are being implemented.

Contextual learning had its true beginning in the work of William James. James believed that instructors should have their students put new knowledge to immediate use in order to build useful systems of association. James contended that the mind operates in a purposeful way to organized thoughts and to process experiences. In his work *Principles of Psychology* (1880), James reflected that without human experience and action, true learning cannot occur.

Within adult education, contextual education has been the focus of many researchers. Research has shown that “people learn best when they begin from what they already know and when the learning process allows them to accomplish something they want to accomplish.”⁴ Additionally, people retain more of what they study if they can simulate or actually perform the task. A contextual approach to teaching and learning seeks to connect subject matter to real world contexts in order to increase student motivation by increasing meaningfulness.

Thomas Sticht proposed a functional context theory in the 1990s based upon his research. When writing about the “turbulence” or student attrition so pervasive in adult literacy, Sticht (1998) proposed that persistence and attendance would be markedly improved if programs could provide education directly linked to job training objectives.⁵ Sticht suggests that students who cannot link instruction to some direct outcome of significance to their lives are less likely to persist in the adult education program. For Sticht, functional context education is the most expedient way of providing adults with important knowledge in critical areas of their lives as they do not often have a long period of time to learn basic literacy skills in order to improve their work opportunities or role as a parent or community member. Sticht’s approach focuses on the

⁴ Auerbach, E. R. (1992). *Making meaning making change: Participatory curriculum for adult ESL literacy*. McHenry, IL: Center for Applied Linguistics and Delta Systems

⁵ Sticht, T. G. (1998). *Passports to paradise: The struggle to teach and to learn on the margins of adult education*. San Diego, CA: San Diego Consortium for Workplace Education and Lifelong Learning

mastery of tasks viewed as essential in various areas of life as evident in his emphasis on contextual learning through his research on military and workplace literacy.⁶

Contextualized Approach to Curriculum and Instruction

According to contextual learning theory, learning occurs only when students (learners) process new information or knowledge in such a way that it makes sense to them in their own frames of reference (their own inner worlds of memory, experience, and response). This approach to learning and teaching assumes that the mind naturally seeks meaning in context, that is, in relation to the person's current environment, and that it does so by searching for relationships that make sense and appear useful.

Teaching students in ways that they can understand is essential to ensuring that real learning takes place. When students see the connection between the concepts they are learning and the way in which these concepts are used in the real world, they are involved in contextual learning. Education becomes purposeful for students when it bases a solid content into a real-world context.

Dale Parnell in his book *Why Do I Have to Learn This?* (1995) identifies seven principles that form the framework for contextual education. "These principles of contextual education are:

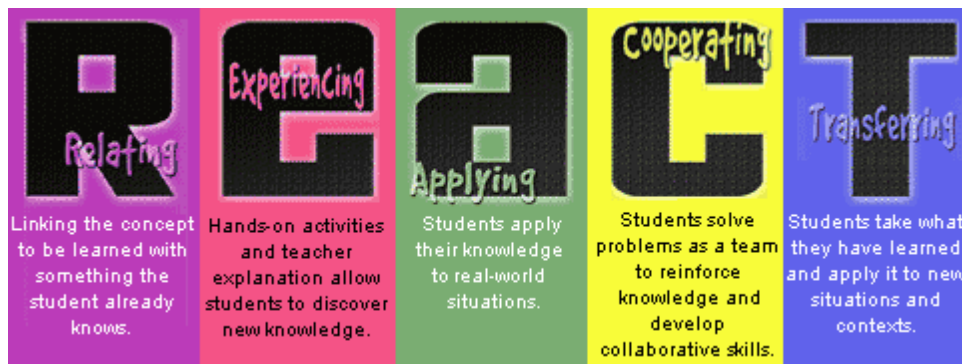
1. Purpose Principle: Teachers help students understand . . . not only what they are to learn, but why!
2. Building Principle: New knowledge and new units of study are . . . connected with students' prior knowledge or past learning so that new learning builds on prior experience.
3. Application Principle: New knowledge is specifically related to its practical, real-life application – especially how it relates to students' future roles as citizens, consumers, workers, family members, lifelong learners, healthy individuals, and participants in cultural and leisure events.
4. Problem-Solving Principle: Students are encouraged to become active learners by using new knowledge and skills to solve problems.
5. Teamwork Principle: Students learn teamwork and cooperation by working together to solve problems.
6. Discovery Principle: The classroom slogan is "Try It!" Students are guided toward discovering new knowledge rather than having the answer (or multiple answers, as is often the case) handed to them. Teachers help students explore, test, and seek their own answers, often with the help of learning partners.
7. Connection Principle: Teachers help students see the connections between context and content, knowledge and application, one discipline and another. Divisions between traditional disciplines are minimized."⁷

⁶ Sticht, T. G. (1997). *Functional context education: Making knowledge relevant*. San Diego, CA: Consortium for Workforce Education and Lifelong Learning

⁷ Parnell, Dale. (1995). *Why do I have to learn this?* Wacim, TX: CORD Communications, Inc., 8-9

The Center for Occupational Research and Development (CORD) provides a supporting framework for contextualized education through describing five essential forms of learning that are required to prepare students for greater success in careers and higher education. Often referred to by the acronym REACT, these skills are:

- **Relating** – placing learning in the context of life experiences to call attention to everyday sights, events, and conditions and then relating those everyday situations to new information.
- **Experiencing** – providing hands-on learning opportunities for students so that they can learn in the context of exploration, discovery, and intervention by manipulating equipment and materials and actively researching problems.
- **Applying** – taking concepts and information and placing students into an imagined future (a possible career) or into an unfamiliar location (a workplace) through text, video, labs, and activities, as well as firsthand experiences such as plant tours, mentoring arrangements and internships.
- **Cooperating** – learning in the context of sharing, responding, and communicating with other learners. Cooperating helps students learn the materials and is also consistent with the real-world focus of contextual learning through small-group and partnering activities.
- **Transferring** – enabling students to gain confidence in their own ability to transfer skills that they know to new contexts. Building new experiences on what students already know assists them in developing confidence and retaining their sense of dignity when confronted with a new situation.⁸



In addition to the seven principles of contextual learning, Parnell describes the contextual learning process model through which a learner moves in order for learning to become meaningful. These elements are often referred to as the *Four As of Meaningful Learning*:

- **Acquisition** - learn and retain to apply to real life situation.

⁸ The Center for Occupational Research and Development (CORD). Retrieved from the World Wide Web at: <http://www.cord.org/the-react-learning-strategy/>

- Application - actively engage in practicing and processing information in real life context, performing authentic tasks to gain an understanding of how information applies to real life.
- Assimilation - demonstrate sufficient understanding of context and content to apply knowledge and skills effectively to new situations (e.g., reading signs in a driver's manual, but also reading signs at work; reading signs in the community; and reading signs in the airport or at the bus terminal).
- Association - learning is organized around problems and themes, students learn to transfer, apply and assimilate knowledge to new problem solving situations (e.g., reading signs are necessary for my drivers' test, but do I need to know how to read signs when reading the directions with my new computer?).⁹

Why Should I Use a Contextualized Approach in My GED® Classroom?

The benefits of contextualized learning for the learner are that:

- The purpose of the learning is explicit. The learner knows why and how instruction will be provided and applied to real-world situations.
- Learners are actively learning and sharing previous knowledge with each other.
- What is being learned impacts their lives in their roles as parents, workers, and community members.
- Skills learned in the classroom can be used outside the lesson to solve real-world problems.
- Students are responsible for their own learning and can control their learning process by the rate of participation.
- Knowledge learned in the classroom is easily transferable to different situations as the skills learned are immediately recognizable in real-world settings.

There are also many benefits of a contextualized learning process for the education setting and the instructor. An effective contextualized learning system:

- Increases student knowledge retention;
- Increases student motivation;
- Views learning as a team effort between the teacher and the learner, encouraging student persistence; and
- Makes learning the learner's responsibility.¹⁰

Creating a Contextual Learning Environment in the Adult Education Classroom

Contextualized learning looks different depending on the content. An important part of all contextualized classrooms, however, is the use of authentic tasks or materials. Authentic tasks

⁹ Ibid 14

¹⁰ Center for Occupational Research and Development (CORD). Retrieved from the World Wide Web at: www.cord.org

replicate challenges faced in the real-world, as well as lead to tangible end products. They enable students to demonstrate their proficiency in applying the concepts and skills they have learned in real-world situations.

When planning contextual lessons for your GED® program, you may wish to use the following questions designed by Jonathan Mueller as a guideline.¹¹

- What do you want students to know?
- Why do they need to know it?
- How will you know they know it?
- How will they learn it?

It's important to provide students with access to authentic materials in the GED® classroom. Research has indicated that the use of authentic materials increases the learner's motivation and retention level.

The following are a few ideas to get you started:

- Graphic-based materials – photographs, graphs, tables, charts, and maps
- Visual/auditory materials – news clips, comedy shows, stories on tape, documentaries
- Print materials – newspaper articles, book/movie reviews, letters to the editor and editorials, advice columns, informational brochures, print advertisements, leases, employment applications, employee manuals, memos, letters, food order slips, operational procedures, safety logs
- Tools – computers, calculators, spreadsheets, measuring tools¹²



Resources

The following is a great resource on contextualizing education:

- Center for Occupational Research and Development (CORD)
www.cord.org

¹¹ Authentic Tasks. North Central Regional Education Laboratory. Retrieved from the World Wide Web at: <http://www.ncrel.org>

¹² Mueller, J. Authentic Task. Authentic Assessment Toolbox. Retrieved from the World Wide Web at: <http://jonathan.mueller.faculty.noctrl.edu/toolbox/tasks.htm>