How to Build Bridge Programs that Fit into a Career Pathway

A Step-by-Step Guide Based on the Carreras en Salud Program in Chicago

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http://www.iccb.state.il.us/pdf/shifting%20gears/Instituto2010_HowToBuildBridgePrograms.pdf
How to Contextualize a Bridge Curriculum

Contextualization is key to the effectiveness of a bridge program. Teaching basic skills to under-prepared adult students within a specific context promotes student retention in the program by engaging their interest, and it advances them more quickly than other methods. It also ensures that they gain technical and transferable skills in addition to the academic skills. When contextualizing curricula, it is important to determine the basic skill level of the student, whether in terms of ABE, ESL, or both. This will determine the type of context (general context, macro context, micro context, and vocationalization, explained later) to be applied at each level. The basic skill level will also guide the instructor in the teaching methodology to use (pedagogy or andragogy, also explained later). Another element influenced by the basic skill level is the type of assessment (standard text or project-based) used to measure each student’s content knowledge acquisition. Technology use in the learning process is also determined by each student’s level of basic skills.

Skills

Basic Skills
Basic skills are the foundation needed to learn technical and professional material. Traditionally there are two basic skills, language (listening, speaking, reading, and writing) and mathematics. Today, with the inclusion of computers in nearly every profession, computer skills are also considered among the basic skills necessary to more advanced learning. In the contextualization model, the basic skill levels indicate which of several learning strategies should be used. In ABE, the skill levels correspond to grade levels. So, for example, basic skill grade level 6 is the same academic level attained at the completion of the sixth grade. In adult ESL education, The Illinois Community College Board identifies five skill levels: 1) literacy, 2) beginning, 3) intermediate low, 4) intermediate high, and 5) advanced. The competencies required for each of these levels are described in Appendix C.

Technical Skills
Technical skills are work-related skills that will qualify a person to perform a specific duty or activity in a job. Technical skills are detected only on the job, and are not related to credentials or certificates. Credentials or certificates indicate that the person has the knowledge (theory), but they do not necessarily indicate that the person has the technical skills to perform a job. Theory and technical skills can be taught simultaneously by incorporating project-based activities, assessments, and internships in the curriculum, which are evaluated by both the educational institution and by the industry.

FIGURE 11
Industry-Required CNA Technical Skills

- Recognize abnormal vital signs
- Observe abnormality in patients and report problems (bleeding, drainage, machine malfunctions, safety situations)
- Understand and implement patient care plan
- Collect, label, and transport specimens to the appropriate area
- Provide comfort to patients by positioning, bathing, straightening linens
- Regularly prepare patients for meals and assist in feeding them if necessary
- Observe established policies and procedures for proper patient treatment
- Demonstrate knowledge and safe use of equipment
- Appropriately and safely transport patients to required areas in the hospital or institution
In **Carreras en Salud**, each bridge program is designed to allow participants to acquire the technical skills to perform well at the next level in the career ladder. The Pre-CNA Bridge prepares students to become a CNA. By the end of the bridge program, students are able to pass the State written exam, which indicates they have the required knowledge, and the industry certifies that they have the technical skills by giving a passing grade in the practicum or clinical. While CNA job descriptions vary depending on the employer, there is a required set of industry skills, listed in Figure 11.

**Transferable Skills**
Transferable skills are those skills that, when applied, enhance the effectiveness and efficiency of technical skills and are not job-specific. In **Carreras en Salud**, the industry recommends that each healthcare professional trained demonstrate the following transferable skills.
- Critical Thinking/Common Sense
- Analytical Skills
- Problem Solving
- People Skills
- Communications
- Time Management
- Study Habits

**Contexts**
In the pre-college bridges, the technical skills become the context in which the basic skills are taught. Both are taught at the same time. The type and amount of context to be included in the curriculum depends on the basic skill level of the student. There are four types of context that progress from the least context to the most context: general context, macro context, micro context, and vocationalization. These types of contexts should be integrated in the contextualization of the curriculum as follows.

**General Context**
General context refers to no industry content or context. This is the context used in most traditional ESL and ABE classes. Basic English skills, reading, and/or math are taught in scenarios related to daily life situations, such as going to school, the doctor’s office, or the supermarket. Teaching in a general context can be effective for students at the literacy ESL level, which is the lowest level, and up to the sixth grade academic level. These ESL students are just beginning to learn English words and are being introduced to numbers. At this level, the goal is for students to learn as much information as possible so they can build a database of terms that will serve as a foundation for future learning. Emphasis should be placed on basic skills (language, math, and computers) and very little on an industry context. If an industry context is used at this level, the industry information should be limited to very general aspects of the industry. As students progress from the literacy level to beginning, the general context is less motivating and instead the macro context should be introduced.

**Macro Context**
Macro context focuses on a sector such as manufacturing, health, transportation, insurance, or hospitality, without concentrating in a particular profession within the sector. The use of the macro context in the curriculum is very effective for students at the beginning level of English. At this level students understand sentences and paragraphs, can solve basic numerical operations, and understand the functions of a computer. With these skills, students can process data related to a specific sector or industry. The macro context will bring students the opportunity to learn more details on the industry where they want to work. They learn about the rules and laws of the industry, the different professions within the industry, and specific jobs with their descriptions. Students enjoy the fact that they are covering material related to the industry they are interested in pursuing.

The healthcare industry macro context is integrated into the curriculum and lesson plans in the **Carreras en Salud** Pre-CNA Bridge. Students improve their basic skills in a macro context by learning the general...
concepts of the healthcare industry, laws, regulations, and especially the different career tracks in the healthcare industry (therapeutics, diagnostics, health informatics, and biomedical) and professions within each of those tracks. As the students increase their English proficiency and/or basic academic skills, they will demand more details on the profession, which warrants the micro context. If the instructor does not switch to a micro context, students may lose interest and even withdraw from the class.

**Micro Context**
Micro context focuses on a particular profession within an industry or sector. For example, in the healthcare sector the micro context focus can be therapeutics, diagnostics, health informatics, biotechnology research and development, or support services. Micro contextualized curricula are very effective with students at the intermediate ESL skill level. These students are able to process technical materials related to a particular profession. They have the capacity to use computers for research and to solve simple mathematical problems. At this level the students are looking for a more focused class with more detailed information in a particular profession and the skills needed to successfully perform the duties required by the position.

In Carreras en Salud, Pre-LPN Bridge students are at the intermediate ESL level and are introduced to the specific technical skills needed by a LPN. Students improve their ESL and ABE skills within the context of Anatomy, Physiology, and Health Psychology, and are introduced to EKG and Phlebotomy skills. The micro context at this level helps students relate their more general skills acquisition to the specific job they want.

**Vocationalization**
Vocationalization focuses on aptitudes required to develop or improve skills needed for a specific job, emphasizing academic and vocational education, as well as the higher order of thinking and interpersonal skills demanded in that job. The use of project-based learning is a good example of vocationalization.

Bringing real work situations and projects to the classroom helps students to enhance their vocation for a particular profession. Vocation includes the use of methods, techniques, regulations, and assessment of a profession. An employee with a good vocation is synonymous with a productive employee. Vocationalization works well with students at the advanced ESL and basic skills level. These students are deeply interested in a specific job within a profession and understand its requirements, skills, and demands. These students understand and feel comfortable with the profession, and want to learn as much as possible about it.

The most common mistake in contextualizing curricula occurs when the wrong context is used. Using a micro context with students who are at the beginning basic skill level will confuse and frustrate students, who may quit because they cannot understand the technical material. On the other hand, if the general context is used with students at a high basic skill level, they can lose interest and motivation.