

NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH (NCCER)

SPANISH-LANGUAGE INITIATIVES REPORTS

OUR PROCESS

Upon The growing need for training in Spanish, a survey was conducted among sponsors, users and Subject Matter Experts (SMEs). The results indicated the highest ranking titles needed in Spanish. The proposal for these translations was presented to the Workforce Development Committee in October 2006.

Experiences with the translation of Core Curriculum, Sprinkler Fitting and Field Safety have taught us we cannot conclude books without the technical vocabulary validation of SMEs. As a consequence, it was decided to follow the following order for the development of all Spanish materials when possible:

1. Translation of the Assessment
2. SME Workshop
3. Release of the assessment
4. Development of technical glossary. This will eventually be a part of our construction dictionary
5. Translation of the book

Workshops with SMEs last 2 to 3 days. These are labor-intense meetings, where bilingual SMEs, NCCER's Project Manager and a representative from "Prov" (3rd party assessment provider out of Provo, Utah) gather to compare and contrast English-to-Spanish interpretations and ensure the meaning has not been lost in translation. A professional translator often does not have the craft expertise to understand all technical concepts, and we have found many instances where these concepts are misinterpreted. In addition, the SME committee that reviews all assessment items will help us adjust the language to one that is representative in his/her field.

Unlike English, Spanish has diversified due to cultural, geographical and historical factors. Even within Mexico itself, there are several discrepancies on how to name certain concepts¹. To address this, we try to employ several variations of the word in parenthesis. In most circumstances, we have used the conversational "*Span-glish*" we know and use all the time. NCCER and Prov feel comfortable with this language variation, since our goal is to communicate concepts effectively; not to confuse our audience.

A very important step during these workshops is our Standard-Setting, or "Angoff" process. Here, each SME assigns a rating between .25 and .95, according to the difficulty level he/she deems fit. For example, if I rate .80, this means I believe 80% of the craft workers who take this test will get this right. The reason for .25 and .95 parameters is because anything outside of this range is statistically impossible in a multiple choice question with four (4) choices. To have a reliable outcome, we need at least five (5) SMEs rating every item. The cut score for the Spanish versions of each assessment will be adjusted to be the same as the English version through a process known as "scaling" that uses a linear transformation.

¹ One example was during our Scaffolding assessment meeting, where one person from Nuevo León argued the proper translation for "brace" was "riestra", while another from Monterrey believed it was "travesano". It was later agreed that "travesano" was the most common term, and that the English word "brace" should be kept in parenthesis, since workers hear and use these words in English all the time.

WORK SUMMARY

Assessments Completed

Assessment	Cut score
Concrete Finisher	70
Core Curriculum	78
Industrial Insulator	70
Industrial Pipefitting	68
Masonry, Level 1	76
Reinforcing Iron & Rebar	74
Rigging Fundamentals	70
Scaffold Builder	71

Assessments with workshops pending

Assessment	Proposed workshop date
Industrial (Form) Carpentry	May 2008
Crane Certification Exams 1. Lattice 2. Boom truck 3. Hydraulic 4. Industrial & all purpose	May 2008
Industrial Electrician	October 2008
Industrial Maintenance (Electrical)	November 2008
Industrial Coatings	TBD (Depending on the English version)
Industrial Ironwork	TBD (Depending on the English version)

NCCER Contren Learning Series published by Pearson (formally Prentice Hall) Curriculum Translation Schedule:

Completed

- Core Curriculum
- Field Safety
- Sprinkler Fitting
- Scaffolding

Currently in production

- Carpentry Fundamentals
- Concrete Finisher
- Insulating
- Reinforcing Iron
- Drywall
- Pipefitting
- Rigging fundamentals

Next in line for translation

- Carpentry (Forms)

NCCER TRANSLATION PROJECT STATUS		
Curriculum or Assessment?	Title	Current Status
Curriculum	Carpentry 1	Final Stages
Assessment	Concrete Finisher	Released
Curriculum	Concrete Finisher	Currently being edited
Assessment	Core	Released
Curriculum	Core	Released
Curriculum	Drywall	Manuscript due April 2008. Gathering SMEs for long-distance revision.
Curriculum	Electrical 1	Waiting on English-language updates. Gathering SMEs for long-distance revision.
Curriculum	Field Safety	Released
Assessment	I.M. Electrician	Waiting on English-language updates. Gathering SMEs for meeting.
Assessment	Industrial Carpentry	Waiting on English-language updates (September 2008)
Assessment	Industrial Coatings	Waiting on English-language updates. Gathering SMEs for meeting.
Curriculum	Industrial Coatings	Waiting on English-language updates
Assessment	Industrial Electrician	Waiting on English-language updates. Gathering SMEs for meeting.
Assessment	Industrial Insulating	Released
Assessment	Industrial Ironworker	Assessment translated - Gathering SMEs for meeting
Assessment	Industrial Pipefitting	Done - Waiting on Prov and Operations for release
Curriculum	Insulating 1	Translated manuscript arrives 3/14/08
Curriculum	Ironworker 1	Waiting on Assessment
Assessment	Masonry	Released
Curriculum	Masonry 1	Edits finalized 3/3/08. Final quark files due from Trusted Translations. Final delivery date TBD.
Curriculum	Pipefitting 1	Manuscript due April 2008.
Assessment	Reinforcing Ironwork	Released
Curriculum	Reinforcing Ironwork	Manuscript due April 2008.
Assessment	Rigging Fundamentals	Final stages. Should be ready for release shortly.
Curriculum	Rigging Fundamentals	Currently working on edits to module 1. The rest of the files will be sent for translation after these edits are finalized. Translator will use this corrected module as a guide for the rest.
Assessment	Scaffold Builder	Released
Curriculum	Scaffold Builder	Released
Curriculum	Sprinkler Fitting 1	Released

UPDATED MARCH 2008

SME PARTICIPATION - WHO IS HELPING US SO FAR?

Carpentry (Long distance revision)

Gustavo Castillo, Brand Services, LLC
Roger Lara, TIC

Concrete Finishing (Hosted by Colorado Contractor's Association)

Jesús Arévalo, Villalobos Concrete
Fermin De Anda, Zachry
Regino González, Baker Concrete Construction
Roger Lara, TIC
Gregorio Maldonado, Aims Community College/ HETA
Jimmy Martínez, TIC
Martín Montiel, Baker Concrete Construction
Eulogio Ramírez, TIC
Rodrigo Rodríguez Jr., Zachry
Carmen Villalobos, Villalobos Concrete

Core (Hosted by Zachry)

Roel Alaniz, Zachry
Gustavo Castillo, Brand Services, LLC
Rolando Cedillo, Zachry
Luis A. Dávila, Zachry
José Gauna, Zachry
Elías B. Guerra, Zachry
Ladd Henley, TIC
José Martínez Cárdenas, Basic Industries c/o Equistar Chemicals LP
Eddie Pérez, Zachry
Juan Pérez, Zachry
Javier Vásquez, Zachry

Industrial Insulator (Hosted by Lee Community College)

Roel Alaniz, Zachry
Luis A. Dávila, Zachry
José A. García, Protherm Services Group LLC
Juan Loya, Zachry
Francisco Olivares, Protherm Services Group LLC

Industrial Pipefitting (Hosted by TIC)

Octavio Castillo, TIC
Ladd Henley, TIC
Humberto Macías, TIC
Delfino J. Torres, TIC

Masonry (Hosted by Falcon Masonry)

Onésimo Martínez, South West Contractors
Bill Smith, South West Contractor
Luther Vargas, Leo's Masonry

Reinforcing Iron & Rebar (Hosted by Zachry)

León García, Zachry
Lauro (Rudy) Garza, Zachry
Mario Mancha, Zachry
Martín G. Ramírez, Zachry
Juan Rangel, Zachry
Juan Rodríguez, Zachry

Rigging Fundamentals

Jimmy B. Herrera, TIC

Oscar Islas, Equipment & Riggers Center, S.A.

Jerry López, Laguna Crane Services

Ray Ramírez, Zachry

César D. Rebolledo, Zachry

Julio Yglesias Jr., Austin Bridge & Road

Scaffold Builder (Hosted by Austin Industrial)

Gustavo Castillo , Brand Services, LLC

José Luis Garcia, Basic Industries Inc.

Johnny Hernández, Xserv Inc.

José Martínez Cárdenas, Basic Industries c/o Equistar Chemicals LP

Valente Ramírez, Brand Scaffold