Technical Learning College

Course Development Summary
Administrative Operations

Subject Matter Experts and Technical Writers
Qualifications and Experience


Melissa Durbin is shown in top photograph teaching wastewater treatment on-site, teaching operators everything from pumps to laboratory procedures. TLC will cover everything from pre-treatment to the final effluent quality. TLC provides professional learning environment utilizing the latest technology in precept-based bites. TLC is redefining high-tech education for the technical professional. Our training methods integrate technology along with personal service into a seamless environment of skill and technical based learning. Our precept-based training system benefits all levels of operators regardless of experience or prior education. TLC's training enables operators to better utilize their skills with emphasizing intellectual and creative talents.

TLC Continuing Education Course Material Development

Background
Technical Learning College is the technical division of the Love of Christ Bible College and was founded in 1999 in Chandler, Arizona. Melissa Durbin is the school's Founder and Dean of Instruction. The college was founded to fill a need in providing hands-on-operator training and to make Disciples of Christ.

The first professional trade that we started training students for was water and wastewater in 1999 and the pesticide industry in 2000. These two professions broaden our environmental educational field. Next was the demand to provide continuing education for the nursing industry and this need took two years to find adequate instructors and materials. Since then TLC has educated approximately forty thousand students in six different disciplines and/or professions. TLC has been providing educational training at facilities throughout Arizona, providing a mobile classroom for rural Arizona for approximately 20 years and at stationary classroom facilities located in Chandler and in Phoenix for approximately 5 years. Back in June 2003, TLC received IACET continuing education approval for our education training. Subsequently, we have dropped IACET for our accreditation organization does not recognize this agency.

Over 30 different governmental agencies recognize and accept TLC's continuing education training. Other state agencies will regularly invite TLC Instructors to travel to their state and train their operators using TLC's training materials and techniques. Other state agencies will often recommend TLC to their operators to utilize TLC's training and professional development materials.

Private College
As a private religious college, the profile, scope, character and community engagement differ greatly from that of other institutions. TLC is an *enterprise* responsible for its own fate, and in which it *invests*. TLC's structure has always been intended to meet the needs of working professionals. Comparisons to other major educational and member-based institutions demonstrate the full extent in training costs. The overall cost rankings of these other institutions including sources of revenue (tuition and fees, state appropriations, federal grants and contracts, all other grants and contracts, gifts, investment income, membership fees, other income sources) place TLC overall educational costs to the student far below peer institutions. The situation becomes untenable when one takes into account other sources of revenue per student that is collected by other institutions. TLC is able to continually re-organize and re-focus our anchor course offerings and on-site training as a means of increasing flexibility, coordination and promoting beneficial synergies and cost effectiveness.

Philosophy
The Technical Learning College believes that every student has the innate ability and intelligence to learn and acquire technical skills. Students have knowledge about their abilities and skills to enhance their knowledge and professional skills. A disciplined learning environment, with innovative and viable community-based academic and vocational curricula, will produce a competent, educated, and self-reliant participant. We strive to teach and instill a learner's proper identity and purpose in respect to their profession.

Educational Mission
The Educational Mission of TLC is:
To provide TLC students with comprehensive and ongoing training in the theory and skills needed for the environmental education field,

To provide TLC students with opportunities to apply and understand the theory and skills needed for operator certification,

To provide opportunities for TLC students to learn and practice environmental educational skills with members of the community for the purpose of sharing diverse perspectives and experience,

To provide a forum in which students can exchange experiences and ideas related to environmental education,

To provide a forum for the collection and dissemination of current information related to environmental education, and to maintain an environment that nurtures academic and personal growth.

Focus
Technical Learning College was established as a comprehensive academic institution of higher learning. TLC offers a wide range of quality academic programs that promote the development and the application of acquired knowledge. Central to our goal of training tomorrow's leaders is the acquisition of problem solving skills and the maturation of both intellect and character. TLC's programs are offered through both conventional classroom courses and in distance learning flexible formats that makes it possible for working adults to achieve their educational goals. TLC's staff and faculty are committed to providing our students the very same personalized service that has been and will remain the hallmark of this institution.

Goals
The goals of Technical Learning College are as follows:

- To offer a quality education, certificates, and continuing education.
- To provide students a higher learning, nondiscriminatory environment.
- To serve as a catalyst for academic progress for all students.
- To establish relationships with other institutions of higher learning.

Our Reporting Structure of Student Training
All students will be tracked by a unique computer generated number assigned to the student. Some students will be tracked and reported by their operator ID for Pennsylvania, Kentucky, Texas and New York. The student's data will be entered electronically to the appropriate State Agency and will be issued a certificate of completion. Approximately half the students are tracked by the computer once they download the course or pay for it online.

TLC Administrative Responsibilities
To ensure that the evaluation system adopted is credible and acceptable, faculty members must have a strong hand in its development and able to encourage the Instructors in mastery of the various subjects. To promote compatibility within the school, standards are reviewed, understood, and accepted by all groups involved in the promotion and tenure review process.

Ensuring a Suitable Physical Learning Environment
In TLC's Classrooms, it is essential to monitor ambient noise, lighting, indoor air quality and/or thermal comfort of the school's physical building and its location within the community. The physical environment of the school speaks to the contribution that safe, clean, and comfortable surroundings make to a positive school climate in which students can learn.

For Distance Based Courses, a decent, quite, safe, and secure facility is essential to successful of our continuing educational programs.

Adult Education Policy
Adults engage in systematic and sustained self–educating of learning adults engage in beyond traditional schooling, encompassing basic literacy to personal fulfillment as a lifelong learner.

In particular, adult education reflects a specific philosophy about learning and teaching based on the assumption that adults can and want to learn, that they are able and willing to take responsibility for that learning, and that the learning itself should respond to their needs. TLC recognizes this concern and promotes proper identity and purpose to the student to recognize that there are water/wastewater professionals. We hope that the student is driven by what one needs or wants to learn, the available opportunities, and the manner in which one learns, adult learning is affected by demographics, globalization and technology.

TLC focuses on Two Different Adult Learning Audiences
Formal – Structured learning that typically takes place in an education or training institution, usually with a set curriculum; like onsite training for operator certification review or math classes or with our distance-based correspondence courses.
Non-formal – Learning that is organized by educational institutions but non credential. Non-formal learning opportunities may be provided in the workplace and through the activities of civil society organizations and groups; like with our safety or pollution control type classes.

Evaluating Courses and Instructors, Conducting Course Audits
Every classroom training and continuing education distance based course comes with Student Survey. We track these survey and the commentary and numbering values and record this data primarily as part of our beta-tracking system. This information is also used to qualify and assess the Instructor. We invite constructive criticism from our peers and Subject Matter Experts to help us in improving our services. We do an annual re-evaluation of all the current CEU courses and objectives to ensure that these are up-to-date and contain relevant data. We make improvements on a daily basis.

Quality Assurance Factors of Our Training Activities
- TLC evaluates compliance with policies and procedures.
- TLC evaluates adherence to instructional procedures described by the sponsor or the State Agency.
- TLC evaluates whether course content is presented as approved by the State Agency.
- TLC evaluates the ability of a course to meet the intended learning outcomes.
- TLC evaluates and ensures the course content for appropriateness in meeting both the objectives of the course and the goals of the State training program or other environmental program.
- TLC evaluates and ensures the quality of instruction presented by the instructor with surveys and commentary.

- TLC evaluates the quality and timeliness of instructor feedback (particularly with respect to distance education).
- TLC evaluates and ensures that the training activity description as presented in any catalog or marketing materials is accurate.
- TLC evaluates and ensures the general effectiveness of a training activity.

Description of Administrative Procedures
Our administrative and recordkeeping procedures are quite redundant in that we first record the student's information into our database. Once the student completes the course assignment, we record the date, check the driver's license, call the student to review the information, State Approval ID number and grade the assignment. We will enter this data into the student database and if necessary, we report the credit to the State.

Next we issue a certificate of completion and email that and the students test score and commentary to the student. We make a copy of the registration page and either print it or make a copy of it and place a copy in the hard file after it is scanned and electronically filed in three different databases to ensure that we do not lose this data.

Personnel Performance Review
TLC implements an Employee Performance Annual Review EPAR on all employees and during that time we perform a background security check-up to ensure that our clients are satisfied with our security so that we can perform training on various government secure locations. We are accountable to our Board and to the State Agencies who accept our courses.

Record Retention
All of our data is backed-up in triplicate and the data is stored indefinitely. We have the data regularly scored off site to ensure that we have a back-up in case of fire.

Subject Matter Experts and Technical Writers

Melissa Durbin

Melissa has 30 years of experience in training students in environmental and safety technology. Melissa started her technical educational career with the City of Phoenix back in 1987. During the following 11 years she progressed through the Water Services Department concluding with the position of Supervisor Trainer.

Melissa has instructed at both Gateway and Rio Salado Community College for an accumulation of approximately 8 years. Melissa taught all of the water/wastewater courses at each college and was instrumental in the development and implementation of Advanced Water and Wastewater Treatment programs for both colleges.

Melissa designed the reverse Osmosis program at Gateway Community College, from building the curriculum to setting up RO skid. She has over 6 years of hands-on advanced water treatment experience, including 3 years of wastewater treatment experience with the Tonto Apache Tribe.

Melissa and Jeff were State of Arizona Department of Environmental Quality approved testing proctors for operator certification examinations for 7 years (2000- 2007). Melissa has extensive experience in safety and health programs, training programs, safety audits, and consultation for numerous clients in the water/wastewater industry.

She has taught over 40,000 students during her teaching tenure. Melissa has accumulated extensive operator certification training/professional development education course writing experience while employed with Technical Learning College.

Melissa serves on the Inter-Tribal Council Operator Certification Board and is an Inter-Tribal approved continuing education, professional development trainer. The Inter-Tribal Council is the only federal recognized non-state operator certification agency.

Teaching Skills
Melissa's extensive educational background and hands-on experience has provided her with the opportunity to be an approved Operator Certification and Training provider in over 40 states and Canada. She is a noted author having written over 50 different technical manuals. Her courses are accepted for continuing education by more than 50 government agencies. Melissa is also an approved structural and agricultural pesticide education provider in Arizona.

Jeff Durbin

Jeff Durbin has taught thousands of students throughout the State of Arizona primarily in the water and wastewater technology field. In addition, Jeff has extensively instructed health, safety and industrial hygiene training. Jeff is a dynamic speaker, utilizing the newest technologies to aid his passion for keep his classes interesting and exciting. Jeff is an extemporaneous speaker on a vast array of technical subjects with a particular love for teaching anything subject related to operator certification health, chemistry and/or biology.

Jeff worked in the water distribution field for approximately 7 years before transitioning to the Water Quality Division for another 10 years in which he mastered biology and water quality and worked in. While working in the distribution field, he learned all the appurtenances, valves, backflow assemblies, fire hydrants and various types of piping.

Jeff is well acquainted with water main breaks, water service connection replacements, proper disinfection techniques and general distribution procedures implemented in emergency field conditions. Jeff's strong suit is in distribution and water quality is his extensive knowledge of hydraulics, backflow prevention and water quality.

Jeff knows every situational condition possible for a backflow to occur and how to prevent such occurrences. Jeff learned these at Gateway Community College and has since been teaching other operators the necessity behind adhering to certain principles and SDWA/EPA Rules during shutoffs or cutting into water mains.

Jeff is very knowledgeable in complex groundwater storage systems and how groundwater is stored, pumped and chlorinated before it enters the distribution system. Jeff possesses strong abilities to troubleshoot water distribution and wastewater collection problems.

Jeff is well acquainted with the safety rules and regulations commonly pertaining to a water or wastewater operator license. Jeff's mastery of teaching both correct and incorrect safety procedures were not just learned by reading a book or being instructed but by real world applications in utilizing correct safety procedures in the field and not cutting corners.

Jeff has extensive water and wastewater sampling experience and has conducted several test programs and environmental assessments during his time in Water Quality. Jeff has taught thousands of students on the fundamentals of proper sampling and preservation and SDWA Rules regarding water and wastewater sampling. Jeff is often called for advice based on his knowledge of sampling regulations, maximum contaminant levels and general operator certification regulations.

Jeff attended Wayland Baptist University while employed at the City of Phoenix and learned the dynamics of Biology and Chemistry. He is able to express this knowledge in an easy-to-follow teaching method. Jeff utilizes these same principles for teaching math and has successfully taught those viewing themselves as "un-teachable" simple mathematic formulas and basic calculations. Jeff is a popular instructor and speaker and is in high demand particularly due to his work in the field.

Other Wastewater/Water Subject Matter Review Experts

A few of TLC's Staff members, technical writers, course reviewers, research and copy editors.

James L. Six Received a Bachelor of Science Degree in Civil Engineering from the University of Akron in June of 1976, Registered Professional Engineer in the State of Ohio, Number 45031 (Retired), Class IV Water Supply Operator issued by Ohio EPA, Number WS4-1012914-08, Class II Wastewater Collection System Operator issued by Ohio EPA, Number WC2-1012914-94

Joseph Camerata Technical Writer, S.M.E., has a BS in Management with honors (magna cum laude). He retired as a Chemist in 2006 having worked in the field of chemical, environmental, and industrial hygiene sampling and analysis for 40 years. He has been a professional presenter at an EPA analytical conference at the Biosphere in Arizona and a presenter at an AWWA conference in Mesa, Arizona. He also taught safety classes at the Honeywell and City of Phoenix, and is a motivational/inspirational speaker nationally and internationally.

Dr. Eric Pearce Technical Writer, S.M.E., chemistry and biological review. Doctorate in science education. Instructor, State College of Technology, Environmental, Health and Safety Technology, Water/Wastewater Operator Training Courses.

Dr. Pete Greer Technical Writer, S.M.E., retired biology instructor. Chemistry and biological review. 17 years as a high school instructor and national expert on science.

Jack White, Environmental, Health Issues, Safety expert, City of Phoenix. Art Credits.

Peter Easterberg Technical Writer, Copy Editor Detail-oriented technical writer/technical editor/desktop publisher/copy editor. 17 years' experience editing and writing feasibility and trade-off studies, test procedures, specifications, user manuals, company policies, HR forms, and ISO-9000 documents.

James Bevan, Water Quality Inspector S.M.E.. Twenty years of experience in the environmental field dealing with all aspects of water regulations on the federal, state, and local levels. Experience in the water/wastewater industry includes operation of a wastewater facility, industrial pretreatment program compliance sampling, cross-connection control program management, storm water management, industrial and commercial facility inspections, writing inspection reports for industry, and technical reports per EPA permit requirements. Teacher and Proctor in Charge for Backflow Certification Testing at the ASETT Center in Tucson for the past 15 years and I possess an Arizona Community College, Special Teaching Certificate in Environmental Studies. Extensive knowledge and experience in college course and assignment/assessment writing.

Various TLC field tours

Pesticide Training Qualifications

Melissa Durbin

Agricultural WPS Train-the-Trainer – Yuma, AZ 2016

College Teaching Certificate 1998

Co-written 20 different nationally accepted pesticide training manuals over a 25-year span.

Co-written 15 different interactive LIMS – computer-based pesticide courses.

Trained pesticide applicators (structural and agricultural) since the year 2000 in approximately 10 different states. Classroom, correspondence and interactive formats.

USDA Subject Matter Expert

Jeff Durbin

Arizona Structural Pesticide License- 2004 – Aquatic, Industrial, Wood destroying, Wood preservation

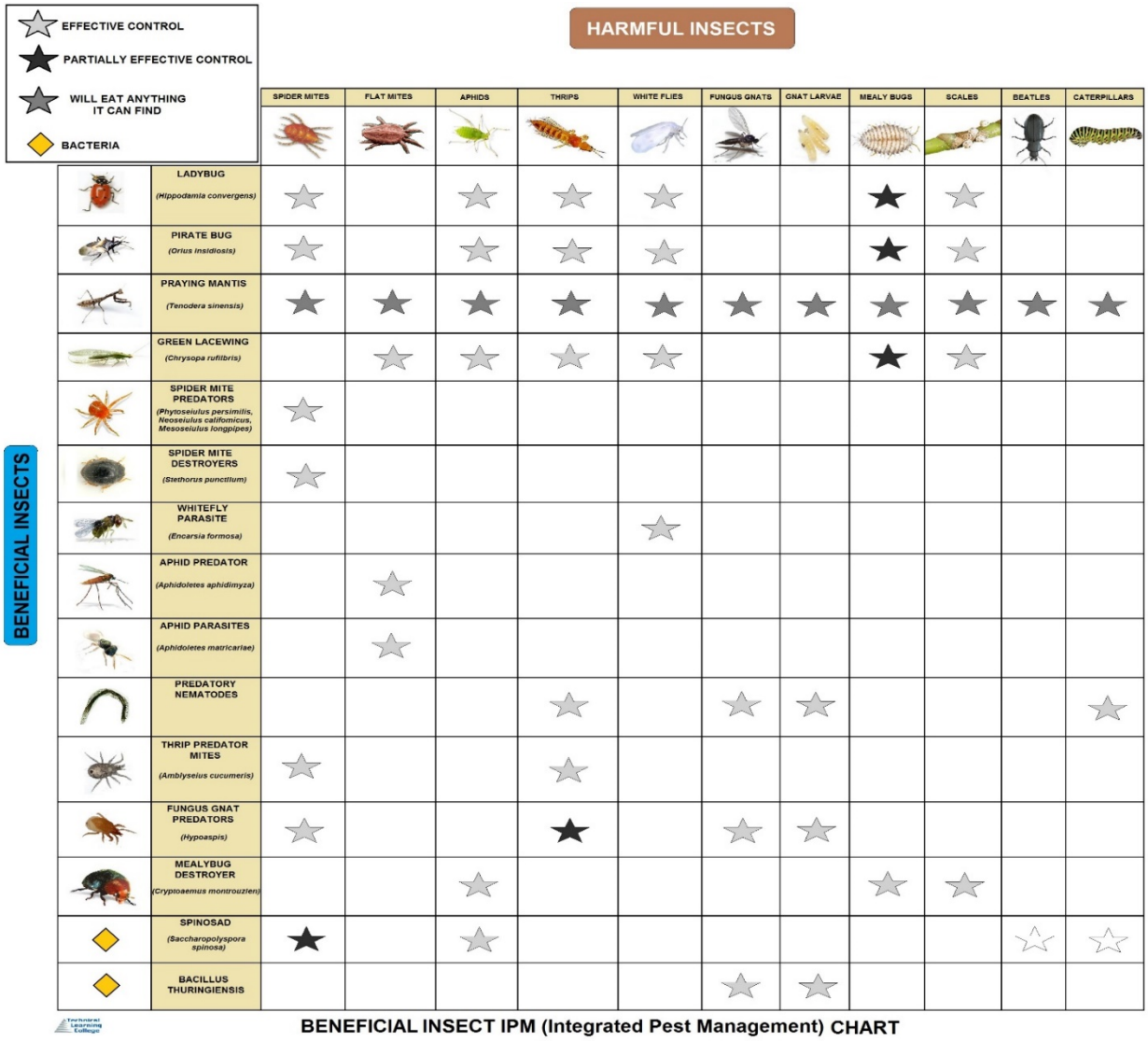
Agricultural WPS Train-the-Trainer – Yuma, AZ 2016

College Teaching Certificate 2004

Co-written 20 different nationally accepted pesticide training manuals over a 25-year span.

Co-written 15 different interactive LIMS – computer-based pesticide courses.

Trained pesticide applicators (structural and agricultural) since the year 2000 in approximately 10 different states. Classroom, correspondence and interactive formats.



BENEFICIAL INSECT IPM (Integrated Pest Management) CHART

Example of TLC's pesticide artwork.

Continuing Education Course Development Summary

Developing a good CEU course requires a considerable amount of planning. We will provide a general course development process that works well when designing our courses.

TLC course development typically has five main phases:
1. Instructional Design Phase (Task Analysis and Training Needs Assessment)
2. Storyboard Phase (Instructional Design phase)
3. Alpha Build (Static testing)
4. Beta Build (Dynamic testing)
5. Final Build (Final Edition)

1. Instructional Design Phase
Task Analysis and Training Needs Assessments have been conducted to determine or set Needs-To-Know for the basis of TLC's continuing education courses. The following is a listing of some of those who have conducted extensive valid studies from which TLC has based the continuing education program upon: the Environmental Protection Agency (EPA), the Arizona Department of Environmental Quality (ADEQ), the Texas Commission of Environmental Quality (TCEQ), Pennsylvania Depart of Environmental Protection (PDEP) and the American Boards of Certification (ABC).

TLC has primary used Training Provider Manual for the Pennsylvania Water and Wastewater System Operator Training Program for course goal setting and learning objectives for all two training formats; conventional classroom, and distance paper based training.

Course Training/Assessment Needs Methodology
Technical Learning College identified training/assessment needs by placing identifying them in two categories; internal and external.

Internal Methods include:
- ✓ Observation
- ✓ Interviews
- ✓ Instruments: Perception instruments and Knowledge based assessments
- ✓ Student records and reports
- ✓ Group problem analysis (Classroom or Seminars)
- ✓ Performance or Survey appraisals

External Methods include:
- ✓ Outside consultants (Completion)
- ✓ Government Certification Reviews (Training Needs)
- ✓ Records and reports from other agencies

The needs assessment/survey maintains our training and education materials criteria. Assessments and changes are performed based on changes in technology, evaluations of the participants and regulatory changes. Materials are assed yearly or as needed to insure no significant changes are made. If this has occurred, the course would be re-evaluated.

2. Storyboard Phase (Instructional Design phase)
In this phase a complete outline of the course content and the course structure (grouped into Learning Objects) is created. The chief Instructional Design phase deliverable is the Instructional Design Document (IDD).

It outlines each Learning Object and its:

- Description (or title)
- Enabling or learning objective
- Keyword(s)
- Knowledge Content (actual knowledge content to be transferred to the learner)
- Suggested teaching aids (visuals, interactions, review components) if available.
- Practice exercises
- Test questions (Final Examination

The storyboard phase is the creation of the course "blueprint", that specifies:

- The overall goal to be made for each Learning Objective
- All media and artwork to be created
- Copy editors provide guidance and direction.
- This step allows all stakeholders to review the material and to enter comments or notes and the course will be given approximately two years for final draft.

3. Alpha Build (Static testing)

- The Alpha Build deliverable is the first version of the actual CEU course, developed in accordance with the approved IDD and storyboard.
- The Alpha build is considered a near-complete build of the course, although some course features are generally not created or incorporated at this stage, including audio files, video files (if required), or test questions.
- Static testing involves learning objective verification, whereas dynamic testing involves learning objective validation. Together these improve course content and learning goals.
- Static testing is often implicit, as proofreading, plus when text/copy editors check learning objectives, course structure, syntax and data flow as static program analysis.

4. Beta Build (Dynamic testing)

- The Beta Build deliverable is the second fully-functioning version of the CEU course.
- The Beta Build incorporates the resolution of any issues identified by the Alpha build review.
- Dynamic testing takes place when the program (course and final assignment) itself is run.
- Dynamic testing often begins before the program is 100% complete in order to test particular sections of assignments to provide editing feedback. Typical review techniques for this procedure are utilizing incarcerated student volunteers, Subject Mater Experts and Course Developers (peer review).
- Ideally, State Agencies will have input or suggestions for overall course learning goals and objectives.
- Beta Tests for CEU courses are not meant to review the content. A subject matter expert (SME) provided the content, and probably double- and triple-checked it for accuracy. The purpose of the Beta Test for CEU course is simply to check the effectiveness,

usability, and functionality of the course from a typical user perspective. Is it easy to understand the course content? Are the assessments (exanimations) intuitive or well explained? Do readers get bogged down anywhere? Do the learners learn? What was the time spent on topic? What did you understand?

Course Training/Assessment Needs Methodology
Technical Learning College identified training/assessment needs by placing identifying them in two categories; internal and external.

1. The difficulty of your course.
   Very Easy 0 1 2 3 4 5 Very Difficult

2. Please rate the difficulty of the testing process.
   Very Easy 0 1 2 3 4 5 Very Difficult

3. Please rate the subject matter on the exam to your actual field or work.
   Very Similar 0 1 2 3 4 5 Very Different

Internal Methods include:
- ✓ Observation
- ✓ Interviews
- ✓ Instruments: Perception instruments and Knowledge based assessments
- ✓ Student records and reports
- ✓ Group problem analysis (Classroom or Seminars)
- ✓ Performance or Survey appraisals

External Methods include:
- ✓ Outside consultants (Completion)
- ✓ Government Certification Reviews (Training Needs)
- ✓ Records and reports from other agencies

The needs assessment/survey maintains our training and education materials criteria. Assessments and changes are performed based on changes in technology, evaluations of the participants and regulatory changes. Materials are assed yearly or as needed to insure no significant changes are made. If this has occurred, the course would be re-evaluated.

5. Final Build (Final Edition)
- The Final Build deliverable is the completed CEU course incorporates all issue resolutions required as a result of the Beta Build review process.
- The CEU course is submitted to State Agencies for review and final comments or corrections are submitted to the editor for incorporation.
- Once the final build is approved and accepted and/or reviewed by State Agency, the course is made available for students.

Awarding CEUs and Maintaining Learner Records

Students receive informational (registration forms) packets prior to course start dates that include course requirements. This is accomplished as listed:

Distance learning participants are tracked by start and finished dates by paper and electronic files. Students receive a course packet that contains reading assignments that correspond to completion dates including competence assessments. Upon completion, the student has the option to fax, mail, or email the completed assignment back to administration and the information is logged with a hard copy and electronic file. Students are given ninety days to complete the course. Policies include student information (extension information) in case the students cannot meet the requirements.

Classroom Courses

Classroom courses use rosters that include sign-in and sign-out or the instructor signature is required to show proof of attendance at the end of the course. This insures that the participants are attending the entire tracked hours for satisfactory completion.

Rewarding Curriculum Hours

The director (Dean or Admission) will calculate the CEU as followed:

CEU Definition

One CEU = ten contact hours of participation in organized continuing education/training experience under responsible, qualified direction and instruction.

Contact Hour Definition

Contact hour = one 60-minute clock hour of interaction between learner and instructor OR learner and materials which have been prepared to cause learning.

Contact implies a connection between a learner and a learning source. For the purpose of the CEU, that connection is two-way. The instructor or learning source must monitor the learner's progress and provide some form of feedback to the learner. This definition applies for face-to-face interaction as well as distance learning programs.

What can be counted:

The following learning activities are examples of types of activities to include when calculating contact hours for CEU:

- classroom or meeting session time led by instructor and/or discussion leader;
- activities, in which a learner is engaged in a planned learning program in which the learner's progress is monitored and the learner receives feedback. (Examples include, but are not limited to, independent study, computer-assisted instruction, interactive video, web site learning, and planned projects.);
- field trips, projects, and assignments which are an integral part of a learning program; and/or
- learner assessment and learning program evaluations.

What CANNOT be counted:
The types of learning listed below can produce worthy learning and are occasionally recognized by the professions and licensing boards; however, they do NOT meet Technical Learning College criteria and should be quantified with units of measurement other than the CEU.

- Unplanned
- Unsupervised
- Non-sponsored
- Anything that is not approved by a State Agency

The following activities are not intended to receive the CEU. These activities may be worthwhile learning experiences; however, they should be measured and documented by some form of measurement other than the CEU.

Academic credit courses: CEU may be awarded for academic credit courses which meet the CEU criteria; however, individual participants should not receive both CEU and academic credit.

Association membership and leadership activities: Holding membership or serving in some leadership capacity in an association or society does not qualify for the CEU.

Committee meetings: Participation in committee meetings and activities do not qualify for the CEU.

Entertainment and recreation: CEU may not be awarded for attendance at cultural performances, entertainment, or recreational activities unless they are an integral part of a planned course, which meets the CEU criteria.

Individual scholarships: CEU may not be awarded for independent writing such as articles, books, research reports, or presentation of papers outside of a planned, directly supervised continuing education/training experience that fulfills the CEU criteria.

Mass media learning programs: Learning programs delivered through the mass media (e.g., television, radio, newspaper) do not qualify for CEU, unless these presentations are an integral part of a planned learning program, which meets the CEU criteria.

Some meetings, conventions, exhibitions: Meetings, conventions, and exhibitions, which attract large numbers of participants, involve different activities, and are conducted primarily for information sharing purposes, generally do not qualify for the CEU. Planned learning activities within such learning programs, which meet the criteria, are eligible for CEU.

Travel: Travel or participation in a travel-study program does not qualify for CEU, unless the educational component of travel-study program meets the CEU criteria.

Unsupervised study: Individual, self-directed study or other form of independent learning experience, which is not planned, directed, and supervised by a provider, does not qualify for CEU.

Work experience: On-the-job training and other work experiences do not qualify for CEU unless the work experience is structured as part of a planned and supervised continuing education experience that meets the criteria. CEU are not to be awarded for life or previous work experience.

Breaks, lunch periods, and periods which are devoted to administrative tasks, such as student introductions and record keeping, may not be counted.

Minimum hours: CEU should not be granted for learning programs that are less than one hour in length. Sessions within a learning program may be of any length. A learning program of short duration, one or two hours, often does not warrant the degree of planning required by the criteria. Caution should be exercised with shorter length learning programs to ensure their adherence to the criteria.

Counting minutes in the contact hour
The 60-minute hour is the standard for awarding CEU.

Calculating the CEU
Determine the number of contact hours by adding all countable portions of the learning program per instructions above. (Example: A learning program has six 50-minute sessions with 10 minutes between for set-up. The number of contact hours would be computed as: 6 X 50 = 300 total minutes in organized, interactive learning / 60 = 5 contact hours.)

Divide the number of contact hours by 10 to get the number of CEU. (For the example above: 5/10 = .5 CEU.)

CEU may be expressed in tenths of a CEU (i.e., 17 contact hours equate to 1.7 CEU; 3 contact hours equate to .3 CEU). Do not express the CEU past the tenths place (i.e., if your calculation should be 1.78, express this as 1.8 CEU)

Self-paced Programs
Self-paced programs include activities or courses in which learner's progress at their own pace. Technical Learning College (TLC) establishes a standard number of contact hours based upon the average number of hours required of several representative learners (pilot group) that complete the course or program. Each member of the pilot group records the actual amount of time spent completing the activity, course, or program. The total hours spent by all members of the sample is totaled, averaged, and divided by 10. The participants of the pilot program do not receive CEU's for the pilot or course CEU determination study. Our preferred policy that the assessment is a proctored closed-book examination.

Example:
Course A is a self-paced home study course with a post-test. Interaction with the instructor is by mail or telephone. To arrive at an average time for completion of the course, five individuals were selected to complete a pilot course. Each participant recorded the actual amount of time spent completing the course as follows:

Student 1: 16 hours Student 2: 10 hours
Student 3: 8.5 hours Student 4: 12 hours
Student 5: 14.5hours
Total: 61 hours; Average: 12.2 hours or 1.00 CEU

Melissa M. Durbin, Technical Learning College

PO Box 3060, Chino Valley, AZ 86323 (928) 468-0665 info@tlch2o.com

Melissa Durbin has 30 years of teaching experience in a variety of environmental educational projects. Her educational services have provided water, wastewater, environmental, health, and pesticide training programs. She was an official ADEQ operator certification examination provider for 7 years as well as pesticide education provider in most states. She was instrumental in the development and implementation of advanced environmental programs for the following colleges: Technical Learning College, Gateway and Rio Salado Community Colleges.

Project Experience

Project, and Location	Position	Responsibilities
Technical Learning College 1998-Present	Instructor Dean	Conducts adult education courses, continuing education training.
Tonto Apache Tribe 2010-2013	Director	EPA Director, director of all EPA water programs.
Rio Salado Community College 1995-2004	Instructor	Conducted adult education courses, continuing education training.
Gateway Community College Phoenix, Arizona 1995-2000	Instructor	Conducted adult education courses, continuing education training. Set-up and designed advanced water treatment, (RO) facility.
Northern Gila County Sanitary District Risk Management Program Payson, Arizona 1999	Consultant	Developed and implemented risk management system, hazard assessments, prevention program, emergency response program, provided source criteria for RMP information, and registered and RMPLAN submittal to EPA.
City of Phoenix Risk Management Program Phoenix, Arizona 1997-1998	Water Treatment Supervisor	Conducted hazard assessments, audits, and policy revisions. Responsible for all phases of water treatment including Arsenic and advanced water treatment processes. All water related sampling and compliance.
City of Phoenix Phoenix, Arizona 1987-1998	Supervisor Trainer	Developed safety programs, Technical Programs for process and maintenance, audits, assessments, accident review, training, job safety analysis, and record keeping. Responsible for continuing education and training personnel.

Previous Employment:

Water Services Department - City of Phoenix - Water Treatment Supervisor - Trainer, 1987 - 1999

Education

Miller Technology Institute - Electrical Engineering 1983, TLCBC - Doctorate of Education in Ministry 2007

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

MELISSA M DURBIN, OP006383

has complied with the requirements for operator certification in the State of Arizona pursuant to Arizona Revised Statutes, Title 49, Chapter 2, Articles 9 and 10, and Arizona Administrative Code, Title 18, Chapter 5, Article 1. Therefore, the Arizona Department of Environmental Quality issues this Certificate.

Certificate Number	Grade and Classification	Expiration Date
76261	Grade 4 Water Treatment Plant Operator	6/30/2019
76263	Grade 4 Wastewater Treatment Plant Operator	6/30/2019
76264	Grade 4 Wastewater Collection System Operator	6/30/2019
76262	Grade 4 Water Distribution System Operator	6/30/2019

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

JEFFREY DURBIN, OP006180

has complied with the requirements for operator certification in the State of Arizona pursuant to Arizona Revised Statutes, Title 49, Chapter 2, Articles 9 and 10, and Arizona Administrative Code, Title 18, Chapter 5, Article 1. Therefore, the Arizona Department of Environmental Quality issues this Certificate.

Certificate Number	Grade and Classification	Expiration Date
71459	Grade 1 Wastewater Treatment Plant Operator	11/30/2018
71460	Grade 4 Water Distribution System Operator	11/30/2018
71461	Grade 4 Water Treatment Plant Operator	11/30/2018
77688	Grade 1 Wastewater Collection System Operator	8/31/2019

Jeff Durbin, Technical Learning College

PO Box 3060, Chino Valley, AZ 86323 (928) 468-0665 durbinjeff@live.com

Jeff Durbin has 30 years of experience in a variety of environmental and educational experiences including; classroom instruction; teaching health, water, wastewater, environmental classes; pesticide and industrial safety. Jeff Durbin is a regular speaker on health/environmental issues at public seminars and workshops. Jeff has extensive regulatory, compliance program experience and curriculum development.

Project Experience

Client, Project, and Location	Position	Responsibilities
Technical Learning College (928) 468-0665 1998-Present	Instructor	General education instructor, health, environmental, water and wastewater treatment, pesticides, pollution prevention, backflow prevention, fireline and source protection, and industrial safety training classes. Developed and implemented operator certification examination program and all operator training.
Town of Payson (928) 474-5242 1999-2006	Water Resources Specialist	Responsible for all water quality and resource concerns for the Town of Payson. Operated advance VOC removal equipment for AWARF facility. Responsible for all water compliance issues.
City of Phoenix Pollution Control Phoenix, Arizona 1986-1998	Water Quality Inspector	Conducted environmental impact assessments, audits, and conducted various environmental enforcement actions. Water conservation, commercial, pretreatment, backflow and water quality issues. Preformed outreach and public relations job duties. Responsible for water and wastewater compliance at several commercial and industrial facilities. Participated in Household Hazardous Waste Collection Events. Developed safety programs, audits, assessments, accident review, training, job safety analysis, and record keeping. Responsible for all water quality issues.

Education

Wayland Baptist University, Occupational Education, Technical Learning College 2003 BA

Professional Registrations and Certifications

Certified State Community College Instructor, Journeyman Plumbers License, OSHA 501 Certification, CPR and First Aid Instructor WSS-4448, Arizona Department of Environmental Quality Grade IV Certification, Cross-Connection Specialist, Industrial Hygienist

Community College Certificate

№ 19692

The
STATE BOARD of DIRECTORS for COMMUNITY COLLEGES of ARIZONA
hereby grants to
MELISSA M. DURBIN

the ARIZONA COMMUNITY COLLEGE *REGULAR A.I.c.* Teaching Certificate entitling the recipient to serve as a professional employee in the Community Colleges of the State of Arizona under the Board's jurisdiction. Issued this *22ND* day of *APRIL* 19 *98*.
Valid for life unless revoked.

OFFICIAL SEAL 1960

Executive Director
Chairman
STATE BOARD OF DIRECTORS FOR COMMUNITY COLLEGES OF ARIZONA

Teaching Field: *WATER/WASTEWATER TECHNOLOGY*

RENEWAL

Community College Certificate

№ 55181

The
STATE BOARD of DIRECTORS for COMMUNITY COLLEGES of ARIZONA
hereby grants to
JEFFREY R. DURBIN

the ARIZONA COMMUNITY COLLEGE **SPECIAL** Teaching Certificate entitling the recipient to serve as a professional employee in the Community Colleges of the State of Arizona under the Board's jurisdiction.

Issued this *5TH* day of *APRIL* *2002*

* *Academic*
** *Occupational*

Executive Director
Chairman
STATE BOARD OF DIRECTORS FOR COMMUNITY COLLEGES OF ARIZONA

KENNETH D. ROCK

SUMMARY

Thirty-two years as a manager, director, or consultant for water and wastewater utilities. Development and presentation of educational and training materials. Experience includes manager of the Scottsdale distribution system, general manager of the Virgin Valley Water District, operations manager of the 167 mgd San Jose Water Pollution control Plant, and leadership of a staff in water, wastewater, and other infrastructure activities in a special district.

- Manual and procedures creation and staff training
- Strategic and master plan creation and guidance
- Board / public / committee / staff presentations
- Research and produce engineering reports
- Budget formation and tracking, with revenue evaluation and adjustment
- Prioritize, develop and manage capital improvements & other projects
- Staff leadership with organization and cultural developments, if warranted
- Facilities startup management and diagnostic work

EXPERIENCE

2013 - 2018 City of Scottsdale: Water Distribution Manager

Responsible for the maintenance, operation, and metering for the City's distribution system. Addressed cultural, turnover and recruitment issues with improved training and personal attention. Made dramatic adjustments to the smart meter propagation program, with budgetary justifications. Wrote all department standard operating procedures. The annual budget is approximately $7 million, including meter replacements, with 48 employees.

2010 – 2013 Virgin Valley Water District: General Manager

Responsible for the District's overall operations, administration, engineering, financing, legal work, and maintenance. Brought in to restore the District after an economic downturn and malfeasance by the previous management. Quickly handled several lawsuits, erased debts, cancelled ill-conceived projects, upgraded wells, empowered the good staff, completed the master plan, got a rate increase, and balanced the budget. Put into action long range plans for sustainable and affordable water applauded by most of the community, regulators, and press. Annual budget was $7 million and there were 18 employees.

2004 – 2010 City of San Jose: Operations Division Manager, Water Pollution Control Plant

Led daily operations at the regional 167 mgd rated wastewater treatment plant on 2600 acres. Coordinated with engineering efforts, prioritized and planned operations and large maintenance activities. Extensive input into master planning, capital improvement priorities, and budgets. Led construction activities' integration with plant operations and wrote over 100 shutdown and startup plans for unique activities. Managed 66 full time positions in 9 job classifications handling all water and biosolids operations.

2000 – 2004 Ventura Regional Sanitation District: Director of Water & Wastewater

Management of all water and wastewater related activities for approximately 15 clients. Facilities included potable water distribution systems, reclaimed water distribution, wastewater treatment plants, pump stations and sewage collection systems. Prioritized

and planned maintenance, operations, line cleaning, protective coatings, administrative and engineering activities. Developed budgets, made staff changes, interacted with clients, and enacted policies. Staff was up to 30 FTE; annual budget was over $4 million.

1989 – 2000 **Kennedy/Jenks Consultants: Operations Specialist**
Construction management for projects with values from a few hundred thousand to over thirty million dollars. Provided operations and maintenance assistance and direction, including startups and trouble-shooting for water and wastewater treatment plants, pump stations, and pipelines. Directed interdisciplinary teams. Wrote O&M manuals, then developed and taught training programs for 5 treatment plants. Constructed and operated 5 process investigation pilot plants for water and wastewater treatment. Directed litigation preparation efforts spanning several years with thousands of hours of work.

1986 - 1989 **James M. Montgomery Engineers: Operations and Maintenance Specialist**
Provided start-up assistance and trouble-shooting at numerous wastewater facilities. Wrote several O&M manuals, developed training programs and trained personnel at 2 wastewater treatment plants and the City of Los Angeles sewage collection system. Developed proposals and made presentations. Managed wastewater treatment facilities and several pump stations and collection systems with staffs of up to 5.

1980 – 1985 Operator at 4 wastewater treatment facilities and a year as an on-site well logger and shopman.

CERTIFICATIONS

- AZ Water Distribution Operator, Grade 4
- AZ Water Treatment Operator, Grade 4
- AZ Wastewater Treatment Operator, Grade 4
- AZ Wastewater Collections System Operator, Grade 4
- CA Wastewater Treatment Plant Operator, Grade V

EDUCATION

Masters, Business Administration: California Lutheran University
Bachelor of Arts, Environmental Studies & Geology: U.C. Santa Barbara
Associate of Science, Water Science: Ventura College
Correspondence Courses, Cal. State University Sacramento

- Water Treatment I and II
- Water Distribution
- Wastewater Treatment I and II
- Wastewater Collections I and II

Academic Research Section

Technical Learning College' s (TLC's) continuing education course material and assessment techniques development was based upon several factors; field experience working in the water quality field, extensive academic research (teaching in the community college system), advice from subject matter experts (State officials and industry leaders), data analysis, task analysis and training needs assessment process information gathered from other states.

Both Melissa and Jeff Durbin the two primary Instructors, Subject Mater Experts and Technical Writers have trained and/or certified more than forty thousand students throughout the U.S. These two Instructors teach on a daily basis in a classroom setting throughout Arizona and through distance learning methods to students worldwide. See below for more information.

Both Melissa and Jeff have been national approved instructors since 2001. They have over thirty approvals from various state agencies from Texas Commission of Environmental Quality (TCEQ), Pennsylvania Department of Environmental Quality (PA DEP), Ohio EPA to New York Department of Environmental Conservation (NYDEP) and New York Department of Public Health (NYDH).

***Qualifications**:* Technical Learning College instructors and subject material experts for this proposal meet the following criteria:

1. Possess teaching certificates from the State Board of Directors for Community Colleges of Arizona.
2. Have Operator Certification (Grade 4) in all disciplines instructing.
3. Have at least twenty years' experience in the water and wastewater field.
4. Have at least twenty years' experience of water training classroom instruction.
5. Have written valid operator certification examination questions and training manuals.
6. Have at least 5 years teaching California Sacramento and AWWA courses.
7. Written over 200 different water related training manuals.

Technical Learning College has trained thousands of individuals throughout the past 15 years throughout the United States and for Inter-Tribal Council. Approximately half of this training has been for operator certification examination preparation while the other half was for safety programs and water related continuing education.

Advice from Subject Matter Experts
Both Melissa and Jeff Durbin are professional trainers and have been educated in current trends in professional education and continuing education needs.

Course Author
Melissa Durbin
This course was co-authored by Melissa Durbin; she has over 30 years of wastewater treatment teaching experience as a college instructor. Melissa has written the several nationally accepted wastewater treatment manuals since 2001. Her courses have been accepted in most States for continuing education credit. She will be available to answer questions relating any of our courses.

Extensive Academic Research
Technical Learning College's (TLC's) continuing education course material development was based upon several factors; field experience working in the water quality field, extensive academic research (teaching in the community college system), advice from subject matter experts (State officials and industry leaders), data analysis, task analysis and training needs assessment process information gathered from other states.

Both Melissa and Jeff Durbin are the two primary Instructors, Subject Mater Experts and Technical Writers have trained and/or certified more than ten thousand students. These two Instructors teach on a daily basis in a classroom setting throughout Arizona and on-line to students nationwide. See below for more information.

Advice from Subject Matter Experts
Both Melissa and Jeff Durbin are professional trainers and have been educated in current trends in professional education and continuing education needs.

Primary Course Designers Melissa and Jeff Durbin
Melissa Durbin
All of our courses were co-designed by Melissa and Jeff Durbin; Melissa has over 30 years of teaching water and wastewater treatment experience as a college instructor. Melissa has written the several nationally accepted water and wastewater treatment manuals. Melissa has taught approximately 40,000 students about water and wastewater treatment and related classes. She will be available to answer questions relating any of our courses.

Jeff Durbin
Jeff Durbin has over 10 years of water and wastewater treatment experience as a water quality inspector for the City of Phoenix and 20 years of water and wastewater treatment experience. Jeff has taught approximately 10,000 students about water and wastewater treatment primarily in water distribution, and pollution control (water quality) related classes. Jeff will also be able to answer any question pertaining to any of the CEU courses.

Policy for determining the Needs of an Audience, Course Objectives and Planning
Primary focus to properly identify your target audience i.e. water treatment and their needs, i.e. electrical, safety, compliance. Conducting an audit of current training materials and comparing the results with training results or skills or objectives to the needs expressed by student surveys and commentary from staff, students and governmental officials. Doing this also prioritizes the objectives for the development of determining course objectives or planning the future training event or manual. This target audience should also include the members of TLC design team; whose support is essential to the success of the training program.

Needs Objectives
Our program should have specific, measurable objectives such as: build awareness of the need for comprehensive training; if that means making a set of manuals or one master manual. To follow the lead of various State Agencies, I.E. US EPA. To foster the proper identity and purpose of the water/wastewater professional.

Evaluating and Approving Course Content
TLC utilizes various governmental (US EPA) information to determine the needs of course development and directions. Many times we utilize Needs-To-Know for the basis of our continuing education courses.

TLC has primary used Training Provider Manual from the Pennsylvania Water and Wastewater System Operator Training Program for course goal setting and learning objectives for all three training formats; conventional classroom, distance paper based and web based training. Approving course content is generally determined by the course designer and is based upon several complex factors, size of course, specific audience, depth of course, price of course and type of assessment. Other areas that are factored in are alpha and beta testing and rights and artwork development costs.

James L. Six
Received a Bachelor of Science Degree in Civil Engineering from the University of Akron in June of 1976, Registered Professional Engineer in the State of Ohio, Number 45031 (Retired), Class IV Water Supply Operator issued by Ohio EPA, Number WS4-1012914-08, Class II Wastewater Collection System Operator issued by Ohio EPA, Number WC2-1012914-94

Kanee Goodfaith Leyira
Mathematic instructor, Masters of Education from the University of Jos, Statistics from the College of Arts and Sciences, Port Harcourt.

Ensuring Consistency when Multiple Instructors and/or Developers
Learning Analytics: TLC is continuously seeks to improve our CEU courses. As increasing types of data become available through student participation in courses, learning analytics (course correction) specialists are finding ways to use this information for decisions about course materials and revisions. Standardizing courses makes it easier to measure their effectiveness and control changes.

Learning Objectives: TLC prefers to use editors who are familiar with the Chicago Style of editing and to utilize “Verb List for Objective Construction”. We also need Staff to recognize the needs of reinforcing the proper identity and purpose of water/wastewater Professionals.

Administrative Purposes: TLC utilizes course design from the requirements in the Pennsylvania Training Provider Manual as our design standard.

Accreditation and Quality: All courses are Alfa and Beta tested and undergo many revisions before the public peruses the material.

Evaluating and Approving Instructional Methods
The most important consideration in our teaching evaluation, both for improvement purposes and for personnel decisions, is the use of multiple methods of teaching evaluation devices involving multiple sources of data, primarily feedback from students and passing rates of assessments.

Jeff Durbin Instructing top photo, Bottom, beta-testing a new course.

Qualifications for TLC Course Instructors and/or Developers

Qualifications for TLC Course Instructors and/or Developers
For water/wastewater: a grade four operator certification or education level with 5 years of operational experience in that field in which one is teaching or writing about. Degree in natural or physical science or math. Possess the ability to teach others and not simply facilitate. Ability to find the antithesis of a subject. Ability to write using the four "C" s. Ability to teach basic water math without any aids except calculator. Should have charisma and able to create drive in students. These qualifications change due to various course needs or requirements. Example, pipefitting would require a plumber or pipefitting background of 5 years. Should be able to speak extemporaneous on a wide range of related subjects. Ability to make a PowerPoint Presentation with accompanying study guide.

Assess Achievement of Course Objectives
There are several ways we assess student learning and all are linked directly to our learning outcomes, we have two types of assessments and these are primarily used in beta-testing, with course correction implementation and in our training survey is used for hands-on training.

- Our Assessments or assignment will align directly with learning outcomes.
- Our Assessments will require students to use their knowledge base, think critically and solve problems and emphasize knowledge construction, troubleshooting, elaboration and evaluation.
- Our Assessments try to reflect/relate to students' interests. For example, increasing their operator grade level or understanding new technologies.
- Just as all students learn differently, students may be able to demonstrate their learning differently as well. We implement various learning techniques to reach all levels of learners.
- We emphasize that specific criteria and analysis is provided for student self-evaluation.

SUMMARY
• Operations and maintenance of public water systems
TLC's Key Personnel possess ADEQ Grade 4 Wastewater Treatment and Wastewater Collections certificates and have been employed by Grade 4 facilities (large POTW) for at least 10 years. This includes several years of field experience in the distribution, water treatment, pollution control, pretreatment, water/wastewater sampling and regulation departments.

• Teaching multi-day training courses for water utility personnel
TLC has provided consulting and training services to over 100 different wastewater treatment/collection facilities in Arizona including for Inter-Tribal Council. Key Personnel possess combined operational and maintenance experience of over 50 years of experience. Melissa has taught 100's of multi-day training courses to operators throughout the United States and Canada.

• Use of adult learning techniques
TLC utilizes *Knowles' theory of andragogy*, in which our trainers recognize that the best resources for learning reside in adult learners themselves. TLC's emphasis in adult education focuses on experiential techniques which tap into the experience of learners, such as lecture, whiteboard, and PowerPoint, group discussion, problem-solving, case methods, simulation exercises, games, and role-play.

Using a combination of these teaching strategies have a successful impact in passing the operator certification examination. Knowles' theory of andragogy is an attempt to develop a theory specifically designed for adult learning. Knowles emphasizes that adults are self-directed and expect to take responsibility for decisions. Lecture, printed study guide with PowerPoint presentation is our primary transmittal technique. This lecture is used in 15- to 20-minute sections spaced with active learning activities to re-energize participants for the next wave of information

Problem-Based Learning
TLC implements problem-based learning (field and technical examples) which is an instructional strategy that encourages critical thinking and problem-solving skills. Participants confront contextualized, ill-structured problems and strive to find solutions i.e., sampling, pumping, customer service, shoring, backflow, pressure or chlorination solutions.

• Development and use of pre-training and post-training quizzes
TLC was an ADEQ Operator Certification contractor (2000-2007) and has written ADEQ's Operator Certification examination questions. TLC has over 18 years of examination and quiz writing experience. TLC has written both objective and subjective quiz questions and implements both questioning methods during multi-day training events. Melissa has written over 100 water related quizzes.

1) Qualifications of Subject-Matter Expert
Melissa Durbin has written 200 water related continuing education courses that are beta-tested, vetted and accepted by most governmental agencies. She has extensive operational and training experience. She is also recognized by the USDA as a subject-matter expert in water.

Method of Providing Learning Support to Participants

All of Technical Learning College's distance learning courses have complete registration and support services offered. Delivery of services will include e-mail, web site, telephone, fax and mail support. TLC will attempt immediate and prompt service. We are about the last training provider who actually answers telephones and talks to the student. When a student registers for a correspondence course, he/she is assigned a start date and an end date. It is the student's responsibility to note dates for assignments and keep up with the course work.

If a student falls behind, he/she must contact TLC and request an end date extension in order to complete the course. It is the prerogative of TLC to decide whether to grant the request. All students will be tracked by a unique computer generated number assigned to the student.

Method of Scheduling and Advertising Courses
Most of our distance-learning courses are open ended and available 24-hours, 365 days a year online. Primarily our business is generated by State Agencies who post our information online. Our secondary method of advertising is word-of-mouth and actual classroom training. We have many return students.

Track Course Registrations
When a student registers for a correspondence course, he/she is assigned a start date and an end date. It is the student's responsibility to note dates for assignments and keep up with the course work. If a student falls behind, he/she must contact TLC and request an end date extension in order to complete the course. It is the prerogative of TLC to decide whether to grant the request. All students will be tracked by a unique computer generated number assigned to the student. Most of these students are electronically tracked once they pay for the course online. We have the ability to electronically monitor the student but are reluctant due to stalking and privacy laws.

Verify and Track Student Attendance
The student shall submit a driver's license for signature verification and track their time worked on the assignment. All students need to make a telephone confirmation to confirm their identity and qualify their assessment/examinations. The student shall sign an affidavit verifying they have not cheated and worked alone on the assignment. All student attendance is tracked on the student attendance database. The signed copies and related paperwork are electronically stored. The hard copies of this information is stored in a different location.

Issue Satisfactory Course Completion Certificate to Students
The student will receive a certificate of completion upon successful course completion. The certificate of completion will have all text in capital letters and there is a water mark of the Technical Learning College in three colors along with anti-counterfeiting security measures on the edge of the certificate. An electronic copy is assigned to the student's electronic record with issue date.

Conduct Post-Activity Course or Program Evaluation
Technical Learning College identified training/assessment needs by placing identifying them in two categories; internal and external.

Internal Methods include:

- ✓ Observation
- ✓ Interviews
- ✓ Instruments: Perception instruments and Knowledge based assessments
- ✓ Student records and reports
- ✓ Group problem analysis (Classroom or Seminars)
- ✓ Performance or Survey appraisals

External Methods include:

- ✓ Outside consultants (Completion)
- ✓ Government Certification Reviews (Training Needs)
- ✓ Records and reports from other agencies

The needs assessment/survey maintains our training and education materials criteria. Assessments and changes are performed based on changes in technology, evaluations of the participants and regulatory changes. Materials are assed yearly or as needed to insure no significant changes are made. If this has occurred, the course would be re-evaluated.

Melissa Durbin teaching

A few of our Copyrighted Training Manuals

TITLE	DATE	COPYRIGHT	ISBN	UPC CODE
Wastewater Treatment	05/07/2007	TX 6-580-136	978-0-9799928-3-4	780979992834
Confined Space	06/19/2007	TX 6-600-031	978-0-9799928-8-9	
Substance Abuse	05/07/2007	TX 6-580-071	978-0-9799928-7-2	
Capacity Maintenance & Operations Mgt.	04/07/2007	TX 6-572-325	978-0-9799928-6-5	
Activated Sludge	06/19/2007	TX 6-600-029	978-0-9799928-5-8	
Arsenic	06/07/2007	TX 6-584-890	978-0-9799928-4-1	
Competent Person	06/19/2007	TX 6-600-030	978-0-9799928-9-6	
Pumping Principles	06/11/2007	TX 6-584-962	978-0-9799559-6-9	
Groundwater Production	06/07/2007	TX 6-584-889	978-0-9799559-7-6	
Hydraulic Principles	04/24/2007	TX 6-558-651	978-0-9799559-8-3	
Water Treatment	04/24/2007	TX 6-582-264	978-0-9799559-3-8	
Laboratory Safety	06/11/2007	TX 6-582-762	978-0-9799559-4-5	
Agricultural Pesticide	06/07/2007	TX 6-582-714	978-0-9799559-5-2	
Chlorine & Disinfection	05/03/2007	TX 6-571-433	978-0-9799559-2-1	
Distribution Basics	04/07/2007	TX 6-572-324	978-0-9799559-0-7	780979955914
Distribution Basics 2nd Ed.	09/06/2007	TX 6-825-267		
Water/Wastewater Sampling	04/07/2007	TX 6-628-700		0006628700

Melissa teaching in a college classroom setting.

ARIZONA FACILITIES THAT HAVE USED TLC

Alvarado Independent School District
Antelope Union High School
Apache Junction Water Company
Arizona - American Water Company
Arizona Game and Fish Department
Arizona Public Works
Arizona State Parks
Arizona State University
Arizona Water Company
Avondale, City of
Bartholomew Engineering
BHP Copper
Buckeye, Town of
Camp Verde Sanitary District
Caterpillar Inc.
Citizens Water Resources
City of Casa Grande
Coolidge, City of
EA2/SYSTEMS
Earth Tech Incorporated
Eloy, City of
Florence, Town of
Gila River Indian Community
Gilbert, Town of
Glen Canyon
Glendale, City of
Grand Canyon Council, Inc.
Hayden, Town of
Herschel Simmons
Hidden Cove Park
Hoque & Associates, Inc.
Jacobs Engineering
JELD-WEN Environmental Department
Litchfield Park Service Co.

PROFESSIONAL REFERENCES

City of Peoria
Cathy Wiestling
8401 W. Monroe Street
Peoria, AZ 85345
623-773-7379

City of Page
Linda Brown
P.O. Box 1180
Page, AZ 86040-1180
928-645-4317

City of Tempe
Holly Bushaw
31 E. 5th Street
Tempe, AZ 85258
(480) 350-2640
Holly_Bushaw@Tempe.gov

City of Scottsdale
Chris Mitchell
9312 N. 94th Street
Scottsdale, AZ 85258
(480) 312-5687
Cmitchell@ScottsdaleAZ.Gov

Arizona American Water
Melvin Huntspoon
15626 N. Del Webb Blvd.
Sun City, AZ 85351
(623) 815-3128
Fax (623) 815-3141
Melvin.Huntspon@amwater.com

City of Chandler
Claire Naylor
P.O. Box 4008 MS 912
Chandler, AZ 85244
(480) 782-3621
Claire Naylor@Ci.Chandler.Az.Us

Far West Water and Sewer Company
Susie Ginn
12486 S. Foothills Drive
Yuma, AZ 85367
(928) 503-4236

Here are a few States that have reviewed and accepted our CEU courses for official CEU credit.

ALABAMA
ALASKA
ALBERTA
ARIZONA
ARKANSAS
CALIFORNIA
CANADA
COLORADO
CONNECTICUT
DELAWARE
FLORIDA
GEORGIA
HAWAII
IDAHO
ILLINOIS
INDIANA
IOWA
KANSAS
KENTUCKY
LOUISIANA
MAINE
MARYLAND
MASSACHUSETTS
MICHIGAN
MINNESOTA
MISSISSIPPI
MISSOURI
MONTANA
NEBRASKA
NEVADA
NEW HAMPSHIRE
NEW MEXICO
NEW YORK
NORTH CAROLINA
NORTH DAKOTA
NY WATER
OETC
OHIO
OKLAHOMA
OREGON
PENNSYLVANIA
PENNSYLVANIA PESTICIDE
RHODE ISLAND
SOUTH CAROLINA
TENNESSEE
TEXAS
UTAH
VERMONT
VIRGINIA
WEST VIRGINA
WISCONSIN
WYOMING

Melissa Durbin showing the proper chlorine gas hook-up procedure. TLC instructors have been to several water providers to show hands-on demonstrations and to teach operators the essentials for providing safe drinking water to the public.