

Task force recommends significant changes to exam policies

President Ted Fairfield charged the Group II Task Force with "studying the current state of the Group II exams with regard to usage, validity, reliability, quality, and cost," while also considering whether certification (as opposed to licensing) should play a role in addressing these issues.

The task force discussed and recommended changes to Examination Policy (EP) 6, Engineering and Land Surveying Examinations; EP 8, Entry of New Discipline to PE Examination Status; and EP 10, Deletion of a Discipline from PE Examination Status and FE Discipline-Specific Module. The Committee on Examination Policy and Procedures (EPP) will present policy changes to Council delegates at the 2002 Annual Meeting.

The task force recommends that EP 6 require NCEES and all Group II exam-sponsoring societies to sign an agreement delineating the tasks that each must accomplish to develop and produce a defensible examination. In an effort to improve examination security, the task force is proposing that all item banks be maintained at NCEES headquarters.

The task force also recommends that EP 8 include the provision that no discipline or depth module be added to the exam program unless it is clear that a sufficient number of examinees exist for an ongoing examination conforming to NCEES policies and procedures. In addition, no request for exams or depth modules may be made by fewer than 10 Member Boards, each demonstrating a need for the exam or depth module.



A PE, PLS, or FLS exam discipline or module should be put on probation if in two consecutive administrations it has fewer than 50 total first-time examinees. An FE discipline-specific module should be put on probation if fewer than 1,000 first-time examinees take it in a two-year period.

—Dale Sall, P.E., L.S.

Lastly, EP 10 should state updated conditions for putting an exam discipline or module on probation. A Principles and Practice of Engineering (PE), Principles and Practice of Land Surveying (PLS), or Fundamentals of Land Surveying (FLS) exam discipline or module should be put on probation if in two consecutive administrations it has fewer than 50 total first-time examinees. A Fundamentals of Engineering (FE) discipline-specific module should be put on probation if fewer than 1,000 first-time examinees take it in a two-year period. When too few examinees take a particular discipline or module, the equating process cannot be properly completed, and the defensibility of the examination comes into question. If some exam disciplines have fewer than the required number of first-time takers, the appropriate exam-sponsoring societies should consider performing outreach efforts to improve the numbers of takers, combining with another small discipline to form one examination, or becoming a module on a Group I examination.

After much discussion, the task force decided it would be impractical to make the Group II examinations pay for themselves by raising the price of only those examinations. A change in exam fees across the board would be more equitable. The Committee on Finance will propose at the Annual Meeting that NCEES raise the price of its PE and PLS examinations to \$125.

Regarding certification, NCEES is an organization of licensing boards and, as such, the task force agrees that NCEES should not be involved in certification

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From the
PRESIDENT



Ted C. Fairfield, P.E.
NCEES President

The Council has made great strides recently in becoming more mobilized to handle interstate comity applications. This has to go down as one of the Council's recent success stories.

President passes the gavel and a host of questions

Time flies! This is the final *Licensure Exchange* article I'll write as Council President. I am truly thankful that you've given me the opportunity to be so heavily involved in some extremely interesting, often controversial, and usually rewarding issues and efforts. Of course, I have to admit that Gail and I are both ready to sit back and let Bob (and Sally) Krebs take over the reins. I look forward to having time to get my car washed, do a little fly fishing, become a regular church attendee again, and renew acquaintances with friends who must think we have moved out of town. However, if this sounds like "whining," I have misstated my true feelings. The experience has been wonderful, personally challenging, and worth every minute!

Here are some of the primary thoughts and questions I am taking with me as I step into the role of Past President.

1. The Council has a staff that is superbly suited to the needs and tasks of NCEES. Betsy Browne has gathered a group that is remarkably talented and always responsive. The addition of Jerry Carter has not only strengthened the staff, but I hope and expect that it will also reduce the intense demands on Betsy's time.
2. I will quote myself from the December 2000 issue of *Licensure Exchange*, "...NCEES can't really be 'led,' or, perhaps more correctly...the Council can't be 'directed.' In other words, the Council is what its Member Boards want it to be, and even more certainly, the Council cannot be and cannot do what its Member Boards don't want it to be or do." I think that

is still true, in spades! On the other hand, the challenge of the Board of Directors is to suggest and define for the Council "where it wants to go" and urge it to go there. And, conversely, as was the case a few years ago with "governance," the Member Boards sometimes overtly reject some of that definition. But the Board of Directors cannot afford to stop trying to lead the Council into the future, and the Member Boards can't afford to fail to respond, I hope constructively.

3. I have to admit that the things that I have seen, heard, and learned over the past four years have caused me to conclude that there is an ever greater need for and also a greater opportunity for the Council leadership to serve NCEES by helping anticipate and facilitate "the future" as painlessly, as wisely, and as constructively as possible.
4. The rate of change in engineering education and in the means and methods of engineering practice is increasing at warp speed. A divided, uninformed Council will not be able to keep up with those changes. It is only recently that the Board and staff clearly realized that their own duties must be expanded, in both breadth and depth, in order to keep up with such changes as they affect licensure issues. These efforts will have to relate both internally and externally to the Council.
5. I firmly believe that NCEES must focus primarily on the future, even while it is dealing with the issues of the present. In fact, I would throw in an admonition that the Council needs to learn "not to sweat the small things," many of

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President passes the gavel... *(continued from page 2)*

which are mere impediments to the future. Or, in “engineer speak,” it seems to me that many of the issues that have constituted inertia within the Council in recent years will soon be viewed in their true light as having been significant, but not critical details, at least as compared with the real issues that are coming down the pike. The Council needs to learn to think and act more quickly and adroitly—and in one voice—on a greater proportion of issues that are facing it now and in the future.

6. I admit to having no answer to the question of how the predominant, generic licensure programs will deal with granting traditional professional engineering status to biology-based engineering graduates (bioengineering, biomedical engineering, etc.), or to graduates in such disciplines as “software engineering” where the education of graduates in those fields will almost certainly not include all of the traditional core knowledges required as qualification for licensure as a professional engineer (PE.).
7. As the engineering profession expands into these diverse fields, there will be inherently less respect for and understanding of the need for and premise of PE. licensure, both within the broader profession and the general public. The Council will have to play a key role in representing its Member Boards on such issues or surely entropy will prevail. It will be difficult for Member Boards to cope with this sea change, when or if it occurs as rapidly as the educators are predicting. About 90+% of recently licensed P.E.’s in the United States are graduates of and presumably working in the relatively focused field of engineering that can generally be called “the built environment.”
8. The Council has made great strides recently in becoming more mobilized to handle interstate comity applications. This has to go down as one of the Council’s recent success stories, though perfection is still not available in some states. Perhaps such perfection will be approached only when the profession learns about and takes greater advantage of the NCEES Records Program, which is much akin to the very successful NCARB Certificate Program, but not nearly so well known or used.
9. No real progress has been made regarding international comity. The roadblock continues to be the expectation of other countries that the Principles and Practice of Engineering exam should be waived for “licensed” engineers from those countries, coupled with the continuing belief of NCEES that such a waiver is or would be inappropriate. It should be noted that the same issue is very much in play in NCARB, the architectural counterpart of NCEES.
10. The Engineering Licensure Qualifications Task Force (ELQTF) might provide some answers to many of the previous questions. However, in order for the results of ELQTF to become functional and widely accepted, it will be necessary for NCEES to take great pains to get the ELQTF “message” out to the whole profession and to the public. This will almost certainly become a large part of the NCEES workload during the next few years.

As I said at the beginning, these are thoughts that I am taking with me; I never promised you the answers! I expect that I will enjoy sitting back as a Past President during the next few years, learning how close to reality my thoughts may have been. Thanks much to all of you for your encouragement and for your continual, wonderful support of NCEES!

Ted C. Fairfield
NCEES President

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Top-quality exam development requires stringent exam security



Besty Browne
NCEES Executive Director

Examination development is the most important function of the Council, and we have to be diligent about protecting NCEES intellectual property.

Exam development volunteers work year-round to ensure that NCEES examinations are of the highest quality and are capable of determining which examinees are minimally competent to practice. This summer has been particularly busy with a number of significant development projects underway. Over one weekend in early June, 74 engineers participated in the Principles and Practice of Engineering (PE) Mechanical and Electrical pass-point sessions. The Naval Architectural/Marine pass-point session was held a few days later with 11 engineers. Pass-point sessions, or standard-setting studies, are held whenever exam specifications change. The Structural II scoring session for the April 2002 administration was held in June. The Structural II examination is the only exam still given in the essay format. It is graded pass/fail in a workshop environment with every examination graded by at least two subject-matter experts. Also in June, a Mechanical examination pretest was held at the California Board office. Ignacio Lopez-Alvarez, P.E., manager of the California Board Examination Administration Unit, recruited eight engineers to take a new version of the Mechanical examination and offer comments on each question. The Mechanical Committee will use the comments to determine which questions should be included in future examinations and which should be revised. This was the second pretest meeting held at the California Board. At the first meeting in January, engineers pretested the Electrical examination. The Environmental Committee held a Professional Activities and Knowledges Study (PAKS) Meeting

in late June, and the Fire Protection Committee held a PAKS Specification Meeting in early August. The PAKS form the basis for determining what information is tested on the NCEES examinations. The Fundamentals of Engineering (FE) Committee held an examination content review in late June, involving 18 representatives from various societies and professional organizations. The FE Content Review plays the same role for the FE exam as the PAKS do for the PE examinations. Look for an article on the FE content review in the October issue of *Licensure Exchange*. In addition to the previously mentioned projects, item-writing and review sessions were held this summer for the Nuclear, Chemical, Land Surveying, Environmental, Civil, Electrical, and Mechanical Exam Committees.

Included in this edition of *Licensure Exchange* are the pass rates for the April 2002 administration. Compared with April 2001, usage for the FE examination increased 10%. NCEES released scores for the April 2002 land surveying examinations at four weeks post administration. This is an all-time record. Many thanks to Member Boards for returning answer sheets to headquarters so quickly.

In addition to examination development, NCEES staff have been occupied this summer with preparations for the 2002 Annual Meeting. If you cannot attend the meeting in La Jolla, catch up with national votes and resolutions by talking with your board delegate(s). Meeting attendees will discuss important issues that will affect the future of engineering and land surveying licensure. The Task Force on Model Law for Surveying and the

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Send letters to *Licensure Exchange* Editor: NCEES, P.O. Box 1686, Clemson, SC 29633 or e-mail to william@ncees.org.

Please include your name and state of residence on the letter. Letters may be edited for clarity, brevity, and readability.

Strategic planning issues include a possible name change in an effort to align our name more closely to our mission and vision.

Top-quality exam... *(continued from page 4)*

Engineering Licensure Qualifications Task Force will present their reports. Read Dale Sall's article in this issue for some of the conclusions reached by the Group II Task Force and motions to be made by the Committee on Examination Policy and Procedures. In support of the Group II Task Force, the Finance Committee will present a motion to increase PE and Principles and Practice of Land Surveying (PLS) examination prices.

President Ted Fairfield created the Examination Security Task Force last year when the need for it became clear, and President-Elect Krebs plans to continue the task force into his term. The task force will present a brief update on its activities at the 2002 Annual Meeting. Examination development is the most important function of the Council, and we have to be diligent about protecting NCEES intellectual property. The costs—in both dollars and volunteer hours—incurred by compromised examinations or lost examination booklets is extremely high. Director of Corporate Services Jerry Carter, Director of Exam Services Susan Whitfield, and Director of Exam Development John Adams will lead a discussion on examination security at the Annual Meeting in La Jolla. Please plan to attend.

The Council will take a big stride toward strategic planning at the 2002 Annual Meeting. Attendees will hear about the results of the strategic planning discussion held at the 2002 Board Presidents/MBA

Assembly and will have the opportunity to provide their input verbally and via a survey to be included in their registration packets. Issues include a possible name change in an effort to align our name more closely to our mission and vision.

The Council's upcoming building expansion has been delayed slightly to ensure we have the most accurate cost estimate. Plans are in the works to award the bid in the middle of October and for construction to begin on November 1. If things go smoothly, the expansion portion of the facility should be "dried-in" in three months. Volunteers and staff are looking forward to having adequate work space.

A bright new face will greet you in La Jolla. Nina Norris, Manager of Communications, will be at the Annual Meeting ready to direct you to the correct meeting room, assist with logistics, or answer any questions that you may have. Norris was promoted to her present position on June 1 and has assumed responsibility for communications, marketing, public relations, promotional support, and meetings. She brings new ideas and skills to the Council, and like the rest of staff, she is eager to serve you.

Enjoy the rest of the summer, and I'll look for you in La Jolla!

Betsy Browne
NCEES Executive Director

Council releases April 2002 pass rates

PE PASS RATE (%)		
Exam	First-Time Takers	Repeat Takers
Chemical	62	32
Civil	59	31
Electrical	67	38
Environmental	73	45
Mechanical	64	47
Naval Architecture/Marine	72	73
Structural I	72	31
LS PASS RATE (%)		
PLS	73	36
FLS	61	46
FE PASS RATE (%)		
	EAC/ABET	EAC/ABET
Chemical	90	60
Civil	81	36
Electrical	80	34
Environmental	70	21
Industrial	65	37
Mechanical	89	48
General	81	32
<p>A total of 310 candidates took some portion of the Structural II examination. Of those who took only the morning session, 28% passed. Of those who took only the afternoon session, 31% passed. Of those taking both the morning and afternoon portions, 15% passed.</p>		

Strategic planning is a bust without membership involvement

“When you come to the fork in the road, take it,” is one of my favorite Yogi-isms. Much to my dismay, I discovered that this utterance was not intended to be some philosophical gem, spoken so that others would contemplate its meaning for hours, but rather a simple driving instruction. Yogi Berra used this phrase when giving directions on how to get to his house in New Jersey. It didn't matter which fork the driver took—he would still get to the same destination.

The Council occasionally comes to this type of fork in the road, and the dilemma of which way to go is not necessarily a choice between right and wrong. Sometimes, depending on the decisions that are made, it may just take longer to get where we want to go. However, there is nothing like a good map to help one make a better decision of which fork to take, even though the resulting destination may be the same.

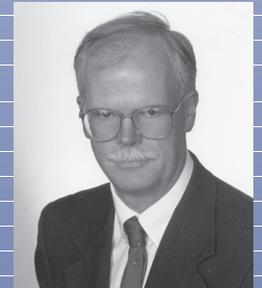
This analogy is very apropos to the strategic planning process that is starting its second year under the Advisory Committee on Council Activities (ACCA). The resultant plan will be the Council's map and guide for decision making. At the February 2002 Board Presidents/Member Board Administrators Assembly held in San Antonio, the groundwork for revising the strategic plan was laid by exploring the relevance of our current mission, vision, and name. This effort was followed by a meeting of the ACCA where members distilled and consolidated the input from that assembly and prepared the report that is available in the *2002 Action Items and Conference Reports*. Please take time to read the ACCA report and familiarize yourself with the issues under discussion.

In observing other organizations, I have noticed there is no productive purpose to strategic planning unless there is consensus and buy-in from an organization's membership. Members of Member Boards, Member Board Administrators, and Council leadership must all be involved in the planning process. In addition, the strategic plan must be a living document—current, active, vital, and easy to revise in order to meet daily challenges. The plan must also be simple and achievable.

Once the strategic plan is assembled, ratified, and put into action, its value can be realized only if Council leadership reviews and discusses various aspects of the plan at every Board of Directors meeting. A strategic plan sitting on the shelf at Council headquarters has very little value. It is easy to see that this approach will necessitate that various goals and objectives occasionally get deleted and, likewise, that new goals and objectives get added.

The direction and future of the Council is the responsibility of all its members. Please contribute to this process and share your ideas, concerns, and issues. I have had the opportunity to speak with some Council members regarding our mission, vision, and name, and I will pass that input along to ACCA. We don't necessarily have to advocate change, but we do need to be prepared to adequately address change. The continual review of our plan should make the Council better prepared and should identify the resources necessary to deal with daily challenges and crises.

*Robert C. Krebs, P.E., L.S.
NCEES President-Elect*



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NCEES President-Elect

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2002–2003 NCEES Board
OFFICER Q&A

At the 2001 Annual Meeting, the Council approved eliminating the requirement in the *Constitution and Bylaws* that elections of the Zone Vice Presidents be ratified at the Annual Meeting. The two Vice Presidents named here have been duly elected by their zones and will begin their terms on the Board of Directors in August 2002 without further action by the Council. Elections for President-Elect and Treasurer will take place at the Annual Meeting on August 8.

Nominee for President-Elect

Donald L. Hiatte, P.E.



Member, Missouri Board for Architects, Professional Engineers, and Professional Land Surveyors; chair, the Missouri Board Engineering Division; vice president, NCEES Central Zone; president, Missouri Society of

Professional Engineers; president, National Society of Professional Engineers (NSPE); chair, the NSPE Board of Ethical Review; chair, Board of Directors for the National Institute for Certification in Engineering Technologies; chair, American Association of Engineering Societies; member, 150th Anniversary Steering Committee for the American Society of Civil Engineers; director, Missouri Selective Service; president, Hospice of Jefferson City Board of Directors; member, Capital Region Medical Center Board of Directors; member, University of Missouri-Columbia (UMC) College of Engineering Public Policy Advisory Committee; recipient, Missouri Honor Award for Distinguished Service in Engineering, UMC Engineering Alumni Citation of Merit Award, UMC Civil Engineering Academy of Distinguished Alumni, and the USA Legion of Merit. Hiatte has worked in state government for 32 years and in private practice since 1990.

Q: *What do you plan to focus on during your term as President-Elect of the NCEES? What are your goals for the next two years?*

A: The one thing I have learned thus far in my Council activities is how much I don't know. Therefore, my major thrust will be to continue my education and understanding of the many different arenas in which the Council is involved. I look forward to working with, learning from, and supporting President Bob Krebs in many different NCEES activities.

In thinking about my goals for the next two years, I am aware that it is not my goals that are important but rather what I perceive as being the goals of the members of NCEES. Therefore, my major goals will be to represent NCEES in a professional and cooperative manner and to solicit input and guidance from our Member Boards, committees, task forces, and NCEES Board of Directors. We are in the midst of a number of activities that began in previous administrations, and it will be one of my goals to assist NCEES in the implementation of the recommendations brought forth by those activities. Also, consensus building with groups with which we have a common interest will continue to be important. In my opinion, licensure of all practicing engineers and land surveyors should be an ongoing goal of the Council.

Q: *The results of the 2002 Board Presidents/MBA Assembly indicate support for considering changing the name, mission, and vision of the Council to more accurately reflect what the Council does. Do you think such changes are needed? Why or why not? Do you have a specific recommendation for what the Council's name should be?*

A: If the activities of the Council are not consistent with our mission and vision statements, then we should evaluate those activities to be sure that we want to pursue those activities. If those activities are appropriate, then we should revise the mission and vision statements accordingly. However, we must remember that our vision statement should be something that we are working toward and possibly will never achieve—it should give us overall direction. In my opinion, the mission statement should be reviewed every year or two to be sure that it is still relevant to what we are doing.

A number of things should be taken into account when considering whether to change the name of NCEES. Will a name change help in the recognition of the Council? Will a change in the name help or hinder promotional activities? Should our name reflect everything we do? And should the

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name reflect who we are? At the present time I don't have a specific recommendation for a name, but a couple of possibilities are: NCLBES—National Council of Licensing Boards for Engineers and Surveyors, or NCLOES—National Council of Licensing Officials for Engineers and Surveyors.

Q: *At its May 2002 meeting, the NCEES Board of Directors approved a long-term plan developed by the Licensure Promotion Task Force to promote licensure and the use of the Fundamentals of Engineering (FE) examination for outcomes assessment. Do you believe promotional efforts on the part of NCEES are important? Why or why not?*

A: I believe promotional efforts can be important to the NCEES from a licensure as well as a financial point of view. The NCEES provides a number of services relating to the licensure of engineers and surveyors; however, few organizations or individuals outside the Council are aware of all we have to offer. The Fundamentals of Engineering (FE) exam and its use for outcomes assessment provides an excellent possibility for a concerted promotional effort. This effort could increase the number of "takers" of the FE and start them on the road to licensure. It could also encourage faculty members who teach advanced/design courses in engineering to become licensed. We could continue our promotional efforts in other areas such as exam study materials, continuing professional competency courses, and the Records Program.

Q: *The Examination Security Task force is reviewing the security procedures currently in place regarding examinations and will make further recommendations at the 2003 Annual Meeting. To what lengths should the Council go to protect its exams? How much money should the Council be willing to spend on exam security?*

A: Examination development is the "heart and soul" of NCEES. The examination process involves a substantial amount of time and effort spent by volunteers, staff, and contract professional psychometricians. The loss of exams accidentally or otherwise is not only a sizeable financial loss but also a significant effort in preparing exams to replace those that have been compromised. With this being the case, the Council, in my opinion,

must do everything that is feasible to protect our exams from a potential loss.

It is difficult to put a dollar amount on how much the Council should be willing to spend on exam security. Also, we have to be aware that if we "pass on" the additional cost in fees to the candidates, we may discourage those who want to become licensed or who are considering licensure. Therefore, it appears to me this issue will have to be considered carefully before a final decision is made. I am interested in seeing the report from our Examination Security Task Force.

Q: *You have served as Central Zone Vice President for two years. What was the most important thing you learned about the Council while serving as a Vice President? How did your vice presidency prepare you for the position of NCEES President-Elect?*

A: The most important thing I've learned is that the Council is made up of not only intelligent people but some of the most dedicated with whom I have had the privilege to work. Anytime I have had a question, a staff member or volunteer has been willing to take the time to explain in detail the answer to my question. I have also discovered that the Council has taken the opportunity to improve the licensure process in many different ways through a cooperative effort of its Member Boards. The past two years as the Central Zone Vice President have given me an opportunity to become more familiar with operations of the Council and to become aware of some of the areas where improvement in the licensure process can be made. I have also found that the folks from other zones are just as supportive and helpful as those within the Central Zone.

Serving as a vice president has given me an opportunity to understand more fully the responsibilities of the members of the Board of Directors. Even though I knew we were fortunate in having a knowledgeable staff, I did not know how kind and eager they would be to help with any request or question I had. I also discovered that the Council has a group of volunteers who take great pride in the contribution they are making to the professions and give freely of their time and knowledge. Thanks to all of you who have been so patient with me and are always willing to help. Without question, we can accomplish great things for the Council as we work together.

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PURPOSE

The purpose of this Council shall be to provide an organization through which state boards may act and counsel together to better discharge their responsibilities in regulating the practice of engineering and land surveying as it relates to the welfare of the public in safeguarding life, health, and property. The Council also provides such services as may be required by the boards in their mandate to protect the public.

Constitution Article 2, Section 2.01

To recover and grow, the Council must continue to expand the Engineering and Land Surveying Examination Services (ELSES) program, build and market the C²Ed program, and look at the possibility of increasing PE examination fees.

Nominee for Treasurer

Martin Pedersen, L.S.



Vice president, NCEES Western Zone; president, Professional Land Surveyors of Wyoming; president, Wyoming Association of Consulting Engineers and Surveyors; secretary-treasurer and president, Wyoming Engineering

Society; president, Wyoming Board of Registration for Professional Engineers and Professional Land Surveyors; councilman and mayor, Sinclair, Wyoming; director, First Wyoming Bankcorp; chair, Rotary District 5440 Youth Exchange; member, Rawlings-Carbon County Airport Board of Directors. Pedersen has worked in private practice as a surveyor for 36 years.

Q: *The 2001–2002 fiscal year has been projected to be a break-even year. Fiscal year 2002–2003 is forecast to end in deficit. What should the Council do to operate with a surplus in the coming years?*

A: The downturn in the economy—lower interest rates and stock-market values—seems to account for part of the fall-off in revenue. To recover and grow, the Council must continue to expand the Engineering and Land Surveying Examination Services (ELSES) program, build and market the C²Ed program, and look at the possibility of increasing Principles and Practice of Engineering (PE) examination fees. The immediate future is extremely important to the Council because of ongoing requests for more examinations and projected plans for building expansion.

Q: *What specific revenue streams should the Council pursue to support Member Board services, licensure promotion, and the like?*

A: The ELSES program, current online exam preparation materials, and a planned increase in exam fees will increase revenue in the immediate future. Marketing the ELSES program to more states will increase this income source, and

building the database and marketing of the C²Ed program which provides continuing education materials online will be a new source that can grow significantly in the future.

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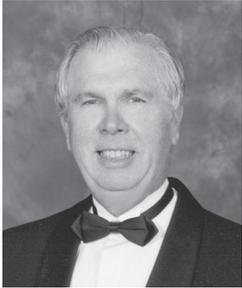
A: Exam security is extremely important to the Council and its Member Boards. The cost to the Council when an exam is compromised is very high. Educating the proctors and board administrators about new methods of cheating and copying is the first step. The task force will be looking at limiting the type of calculators that can be used. However, as we grow smarter, so do those persons attempting to cheat or copy the exams. I believe that ultimately this is going to force the Council to computer-based testing. Until this takes place, we must do whatever is necessary to protect the integrity of the process and spend whatever we have to in order to accomplish this. Unfortunately, this is eventually going to have to be passed on to the exam takers through increased fees to cover the costs.

Q: *You have served as Western Zone Vice President for the past two years. What have you learned while participating as a member of the Board of Directors that will aid you in the role of NCEES Treasurer?*

A: My two years as Western Zone Vice President has allowed me to be liaison and visitor to several committees, allowed me to watch Council staff working on revenue projects, and overall given me a broad view of Council income, spending, and revenue needs. This broad overview and budget background will allow me to transition more smoothly into the treasurer role if elected. Having watched the budget change over the past two years will also facilitate my work with staff on areas that have become important to the long-term growth of the Council.

Central Zone Vice President

W. Gene Corley, Ph.D., P.E., S.E.



Chair, Illinois Structural Engineering Board; founding member, president, National Council of Structural Engineers Associations; honorary member, American Society of Civil Engineers (ASCE); member, National

Society of Professional Engineers, National Academy of Engineering, Illinois Governor's Earthquake Preparedness Task Force; fellow, American Concrete Institute, Institution of Structural Engineers, UK; founding member, vice chair, member of Board of Directors, Building Seismic Safety Council; chair, Chicago Committee on High Rise Buildings, International Standards Organization (Committee TC-71, Concrete), Committee on Building Code Requirements for Structural Concrete; author, more than 160 technical papers and books; recipient, 16 national awards including the election to the National Academy of Engineering, the 2000 NCEES Distinguished Service Award, the Wason Award for research from ACI, the Henry C. Turner Award from ACI, the Alfred E. Lindau Award from ACI, the T.Y. Lin Award from ASCE, and the Martin Korn Award from PCI. In 1995, Corley was selected by ASCE to lead a Building Performance Assessment Team investigating the bombing of the Murrah Federal Building in Oklahoma City. In September 2001, he was selected to head the team to study building performance after the attack on New York's World Trade Center. Corley is senior vice president of CTL.

Q: *What do you plan to focus on during your term as Vice President? What are your goals for the next two years?*

A: During my time in office, I plan to concentrate on the activities of the Committee on Uniform Procedures and Legislative Guidelines and the Special Committee on Constitution and Bylaws. Specifically, these committees expect to be working toward continued modernization of the Model Law and the organizational structure of NCEES. During my tenure, I plan to solicit input from Member Boards so that I can properly represent their views.

Q: *The results of the 2002 Board Presidents/MBA Assembly indicate support for considering changing the name, mission, and vision of the Council to more accurately reflect what the Council does. Do you think such changes are needed? Why or why not?*

A: As a board chair, I'm aware of the results from the 2002 assembly that indicate support for considering a change in the name, mission, and vision of the Council. On these subjects, I have an open mind. While the current name is highly respected and recognized by many licensed engineers, changes in some activities of the Council have made the name less meaningful. I firmly believe that all of the arguments, pro and con, need to be heard and considered prior to changing the name. If Member Boards favor the change, then I will support it.

Q: *The Examination Security Task Force is reviewing the security procedures currently in place regarding examinations and will make further recommendations at the 2003 Annual Meeting. To what lengths should the Council go to protect its exams? How much money should the Council be willing to spend on exam security?*

A: Examination security is perhaps the most important task the Council has. Even the possibility that an examination could be compromised reflects badly on the licensing process. For this reason, I believe the Council should provide whatever resources are necessary to ensure that its examinations are secure.

Q: *Being Vice President of a zone requires a great deal of time and energy. What compels you to serve as an officer of the NCEES?*

A: As my past record indicates, throughout my career I have given back to my profession by serving in leadership positions of professional organizations. If the engineering profession is to continue to serve the public and gain stature in the public's eyes, we must all provide leadership through our professional societies and organizations. As I have served as a Member Board chair, I have developed the desire to serve on the NCEES Board of Directors and assist in the leadership of the Council as it continues to grow into a more effective organization. It is an honor to have the opportunity to serve in this capacity.

While the name NCEES is highly respected and recognized by many licensed engineers, changes in some activities of the Council have made the name less meaningful. I firmly believe that all of the arguments, pro and con, need to be heard and considered prior to changing the name.

Western Zone Vice President

Kenneth R. White, Ph.D., P.E.



Member, New Mexico State Board of Licensure for Professional Engineers and Surveyors; chair, vice chair, Committee on Examinations for Professional Engineers (EPE); chair, civil engineering examina-

tion subcommittee; member, Committee on Education Assessment and Qualification, Computer-Based Testing Oversight Group, Audit Committee, and Structural Engineering Examination/Recognition Task Force; recipient, the November 2000 Leadership in Transportation Research and Development Award from the New Mexico State Highway and Transportation Department, the 1999 Distinguished Service Award from NCEES, the June 1996 Ingeniero Veterano De Nuevo Mejiro Life Time Service Award from the New Mexico Society of Professional Engineers, and the 1994 Transportation Award for Excellence in Research by a Public Member from the Alliance for Transportation Research; coauthor, NCEES white paper "Using the FE Examination as an Outcomes Assessment Tool" and the text *Bridge Maintenance Inspection and Evaluation*. White is chair of the Civil Engineering Department at New Mexico State University.

Q: *What do you plan to focus on during your term as Vice President? What are your goals for the next two years?*

A: Our primary objective must be to ensure that NCEES examinations provide the proper discrimination for public health, safety, and welfare and are fair and equitable to examinees. My goal will be to fully support the dedicated individuals who serve on the examination committees but also encourage discussion and review to ensure the highest quality in the examination product. I am very interested in the interaction of NCEES with the Accreditation Board for Engineering and Technology (ABET) and believe that it is very important that we understand the impact of changes in ABET philosophy upon the educational process and competency of entry-level engineers. I also

want to understand the impact of examination splintering on our licensure process.

Q: *The results of the 2002 Board Presidents/MBA Assembly indicate support for considering changing the name, mission, and vision of the Council to more accurately reflect what the Council does. Do you think such changes are needed? Why or why not?*

A: I think that discussion and debate about changing our name, mission, and vision are healthy. Clearly, the Council is more than just examinations as the name presently implies. However, I think it would be a mistake not to continue to recognize that the examinations are still the primary focus and should remain so.

Q: *The Examination Security Task Force is reviewing the security procedures currently in place regarding examinations and will make further recommendations at the 2003 Annual Meeting. To what lengths should the Council go to protect its exams? How much money should the Council be willing to spend on exam security?*

A: Examination security is vitally important. Anytime an examination is compromised, the valuable time and effort of the examination committee is voided. The expense in generating new examinations is not trivial, plus morale is affected by losing this valuable resource. We also lose the confidence of examinees and their employers when security is questioned. I am not sure I can put an exact number on expenditures, but security must be a very high priority and should be reflected in our effort to maintain security.

Q: *Being Vice President of a zone requires a great deal of time and energy. What compels you to serve as an officer of the NCEES?*

A: I have been an educator for over 35 years, and I am very concerned with ensuring that entry-level engineers (the product of my profession) are properly prepared to enter the engineering profession. The licensure process is a clear "outcomes assessment" of these new candidates if we maintain the proper standards for education, experience, and examination. I want to be a part of that process.

I think that discussion and debate about changing our name, mission, and vision are healthy. Clearly, the Council is more than just examinations as the name presently implies. However, I think it would be a mistake not to continue to recognize that the examinations are still the primary focus and should remain so.

Red Flags of an Ethical Dilemma

If individuals reach adulthood without suffering major psychological traumas, such as child abuse, they are usually capable of determining right from wrong. Many moral problems we face require us to be able to make that determination. Most of the time, adults know right from wrong, but they may be unwilling to pay the price for doing the right thing. When we knowingly choose the wrong thing, we have succumbed to ethical temptation.

Facing ethical temptations is not the same as facing ethical dilemmas. We know it is wrong to lie; we know it is wrong to steal; we know it is wrong to cheat. Thus, it is not really a dilemma when we consider choosing wrong over right. It is merely an ethical temptation.

For example, falsifying an annual report to make the company appear in good financial health is an ethical temptation. As long as an individual knows that this act is wrong, then this problem is not really a dilemma.

However, choosing between two rights is a compelling ethical predicament—for example choosing between telling the truth and maintaining loyalty to a friend. Truth and loyalty are both virtues: what do you do when your friend asks you to lie, perhaps to save his marriage or his job? Choosing between the individual's needs and a community's needs or choosing between justice and mercy are two more illustrations of true ethical dilemmas. Choosing between two or more positive values requires more than ethical competence; it also requires sound ethical decision-making skills.

Developing mature decision-making skills involves recognizing problems when they occur. How can you tell when you are facing issues that have an ethical dimension to them? The following guidelines may help:

1. Frequent use of words such as right or wrong; conflict of interest; bottom line; ethics; and values.

2. Desire to call the state regulatory agency or professional hotline.
3. Making lists of advantages and disadvantages of an action.
4. Feeling torn between two or more values, goals, or parties.
5. Wondering how the outcome of this problem would look in the newspaper headlines.
6. Loss of sleep.
7. Use of expressions such as:
 - "Well, maybe just this once..."
 - "Let's keep this under our hats..."
 - "We'd better look the other way..."
 - "No one will ever know..."
 - "Whew, we certainly dodged that bullet..."
 - "Don't tell me. I don't want to know."
 - "I have this friend..."
 - "No one's going to get hurt..."
 - "Everybody does it..."
 - "They had it coming..."
 - "They'll never miss it..."
 - "What's in it for me?"

These red flags advise of impending ethical challenges. Rushworth Kidder, author of *How Good People Make Tough Choices*, suggests that ethical dilemmas, rather than temptations, will challenge us more frequently and profoundly in the near future as our society becomes increasingly diverse and complex. He cites the ethical dimensions of technological advancements such as cloning and nuclear power to make his case.

Thus, in addition to being able to recognize ethical temptations, adults will also be called upon to be able to determine "Which is the greater good?" It is a challenge to those in positions of influence to help others navigate through the difficult moral terrain which we will face in the next decade and beyond.

*Deborah H. Long
Ethics Specialist*

Deborah Long provides workshops on such topics as ethics and cultural diversity to licensed professionals. She can be reached at d_long@mindspring.com or (919) 968-3742.

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Please send your board news, including notice of board member changes, to the editor of *Licensure Exchange*. NCEES, P.O. Box 1686, Clemson, SC 29633 or e-mail to webham@ncees.org.

Member Board NEWS

ARKANSAS

- ◆ Robert Walters is the new board chair, and Willard Reese is the new vice chair.

CONNECTICUT

- ◆ Leonard Grabowski is a new appointee to the board. Andrew G. Farkas has resigned from the board. The board's Web site address is www.state.ct.us/dcp. Board Administrator Barbara Syp's e-mail address is barbara.syp@po.state.ct.us.

DISTRICT OF COLUMBIA

- ◆ The name of the board has changed to District of Columbia Board of Registration for Professional Engineers.

GEORGIA

- ◆ The term of Thomas Moreland has expired. Robert T. Armstrong is the new board chair.

HAWAII

- ◆ Robert Akinaka and Alfredo Evangelista are new appointees to the board. The terms of Mike Miura and Gary Lee have expired. Laurel Mau Nahme is the new board chair.

ILLINOIS LS

- ◆ Leon Olson is a new appointee to the board. The board's name has changed to Illinois Land Surveyors Licensing Board.

MICHIGAN LS

- ◆ Carl F. Shangraw is a new appointee to the board. The term of Sayed Hashimi has expired.

MICHIGAN PE

- ◆ Licensing Administrator Gloria Keene's e-mail address is gkeene@michigan.gov.

OHIO

- ◆ The board's new Web site address is www.ohiopeps.org.

PENNSYLVANIA

- ◆ Richard J. Hudic, Jr., is a new appointee to the board.

PUERTO RICO

- ◆ Alberto Sánchez is a new appointee to the board.

RHODE ISLAND LS

- ◆ Administrative Assistant Christina Styron's e-mail address is chriss@mail.state.ri.us.

TENNESSEE PE

- ◆ Ann Weeks is the new board chair, Bob Sylar is vice chair, and Andy Pouncey is secretary.

VERMONT PE

- ◆ Staff member Carla Preston's title has changed to board administrator.

WEST VIRGINIA PE

- ◆ The board's e-mail address is wvpebd@mail.wvnet.edu, and the e-mail address for Board Administrator Marcia White is whitemar@mail.wvnet.edu.

Far-reaching change comes to WA Board enforcement program

In its 2002 legislative session, the Washington state legislature passed the Uniform Regulation of Business and Professions Act to become effective on January 1, 2003. This milestone legislation allows the board to retain its full authority and discretion while adding significant clarity to what over the years became vague and ambiguous language in the 1947 originating statute.

Through the 1947 Engineer's Registration Act, the Washington State Board of Registration for Professional Engineers and Land Surveyors was given considerable control and discretion over licensing and enforcement activities. Since then the board has managed, within this statute's framework, to meet the expectations of stakeholders and the public; however, over time the language adopted in 1947 has been found to lack

(continued on page 15)

Far-reaching change...(continued from page 14)

the necessary specificity to enable the board to fully respond to the ever-changing environment of engineering and land surveying practice.

Around 1984, in response to increasing demands from licensees and consumers, the board secured additional resources and initiated an aggressive effort to pursue more enforcement actions. The result was the creation of an investigation and enforcement program that is now staffed by four individuals dedicated to investigation activity and support of the disciplinary process. This new emphasis also highlighted the fact that the original Engineer's Registration Act and the board's administrative rules did not provide a clear structure to address the varying activities that were viewed as misconduct, malpractice, or gross negligence. This became such a problem that most of the charges for misconduct, malpractice, or negligence cited one provision in our statute which read, "Committing any other act, or failing to act, which act or failure are customarily regarded as being contrary to the accepted professional conduct or standard generally expected of those practicing professional engineering or land surveying." This catch-all citation helped fill a need but did so in a clumsy way and did not provide clear notice to the licensees of what "act, or failing to act" truly means.

The limitations the board experienced with its own statute were not unlike similar problems affecting the 25 other licensing programs in the Washington State Business and Professions Division. All these programs have varied levels of licensing and enforcement authority that involved different treatment of disciplinary definitions and sanctions. These differences were seen by the state attorney general as a major impediment to our agency's ability to demonstrate and provide fair and consistent treatment of similar violations.

Washington State Department of Licensing undertook an effort to create an omnibus legislative initiative to establish uniform definitions, processes, and sanctions across all programs. That effort resulted in the passage of the Uniform Regulation of Business and Professions Act during the 2002 legislative session. The act becomes effect on January 1, 2003. This legislation has provided exactly what the board felt was needed to make improvements to its originating statute. It not only allows the board to maintain its full

authority and discretion, but adds significant clarity to what was vague and ambiguous language. For the most part, Washington engineering and land surveying licensees found the terms acceptable and supported the effort for passage. Expectedly, they were most supportive of the new authority granted to the board to deal with unlicensed practice. Currently, the board's only recourse to deal with unlicensed practice is through injunctive relief or pursuit of criminal charges through the county prosecutor. In contrast, the new law grants authority for the board to issue cease and desist orders as well as a citation for up to \$1,000 per day.

In addition to the authority for action in unlicensed practice, this act provides authority for the board to do the following:

- ◆ Conduct practice reviews
- ◆ Impose a summary suspension
- ◆ Appoint pro tempore members to the board
- ◆ Empanel less than a quorum to preside on disciplinary hearings
- ◆ Impose an expanded selection of sanctions
- ◆ Incorporate expanded definitions for misconduct or malpractice
- ◆ Increase fines from \$1,000 to \$5,000 per violation

Though it is early yet to know the extent of the act's impact on the board's investigations and enforcement workload, the board sees the act as an important milestone in its continuing effort to regulate engineering and land surveying practice. In fact, the act is seen as being as significant to the board's effectiveness as the revisions enacted back in 1947.

The originating statute for the board of registration is [Chapter 18.43 RCW](#) (Revised Code of Washington) and is available for viewing on the Web.

George A. Twiss, P.L.S.
Executive Director

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DATE	EVENT	LOCATION
August 6	2001–2002 Board of Directors Meeting	La Jolla, CA
August 7–10	2002 Annual Meeting	La Jolla, CA
August 10	2002–2003 Board of Directors Meeting	La Jolla, CA
August 22–24	EPE Meeting	Atlanta, GA
September 2	Holiday—Office Closed	
September 27–28	Board of Directors Orientation	Clemson, SC
October 25	PE/PLS Exam Administration	
October 26	FE/FLS Exam Administration	

Task force recommends... *(continued from page 1)*

at this time. The Council should continue to monitor certification as it develops among professional and technical societies.

Serving as consultants to the task force were chairs of the Committee on Examinations for Professional Engineers (EPE), EPP, and Finance. The task force held two face-to-face meetings, and the above committee chairs kept their committee members aware of the discussions and recommendations. The committee chairs also involved the task force in the final wording of policy changes to be put forward by the Finance and EPP Committees at the 2002 Annual Meeting.

The task force believes that its recommendations will improve the quality of the examination process and maintain the standard that only minimally qualified individuals should be allowed to practice. Throughout our discussions, we have kept in sight the bottom line of public safety. In addition, the guidelines the task force agreed upon are based on developing, equating, and scoring defensible examinations. Your comments are welcome. Arrive at the Annual Meeting ready to discuss and vote on these important issues.

*Dale Sall, PE., L.S.
Chair; Group II Task Force
NCEES Past President*

EXCHANGE

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