ESP (Expert Skills Program) Administration Guidelines

Introduction to the host institution

This document has been created to support those schools that have decided to encourage the participation of their students in the ESP. At the outset, it is important to emphasize that this is not the type of program that can be required, although it will strengthen any program that is required.

- If ESP is required, its complex nature makes it difficult to measure by standard methods such as correlations.
- Multiple factors determine performance in any given setting; the goal of ESP is maximizing the performance of an individual.
- It is reasonable to require the ESP as a condition for remediation but its effectiveness will be measured in the way it is practiced, e.g. participation in ESP Question Analysis groups or concept maps produced by the ESP method.
- While participation cannot easily be required, documentation of participation can be. This documentation could also involve the new ESP Learning Awareness Inventory once it is validated.

In lieu of a requirement for the ESP, your institution could undertake a project of your own design to link “ESP thinking” with “EPA thinking.” The thinking skills required for entrustable thinking extend beyond building a simple knowledge base. Since the ESP can be applied throughout the pre-clinical curriculum, it is entirely feasible to introduce and teach the EPAs prior to the clinical years. When the description and the matching vignette for each EPA are analyzed, it becomes clear that pre-entrustable thinking is robotic and linear while entrustable thinking is anticipatory and integrative. In other words, EPA thinking should produce better preclinical performance as well as clinical skill.

Motivational issues: Students are no different than the patients they will one day treat. They are not all ready to be helped when they need help nor will they all welcome the advice they need before it is too late. There is no single or simple reason for this or we would see preventive medicine as the mainstay in health care.

- Work with those who are receptive and try to build a population of “true believers” that use deliberate practice to strengthen their thinking skills.
- Maintain the emphasis on individuality, on scientific evidence, and on achievement motivation to bring about long run change.
**Keep in mind:**

1. ESP is a path to more efficient study.
2. ESP transforms receivers into producers.
3. ESP is based entirely on scientific evidence.
4. ESP is addictive with only positive side effects.

All components of the ESP are designed for the benefit of students and faculty at any institution regardless of curriculum. To be clear, this program is free of charge with easy online access to all materials except for some in-house copyright protected case questions used in Step 1 Prep question analysis (Other institutions will need to identify comparable materials to fit their needs.)

**Who do I need to help me and what materials do I need to conduct the ESP?**

A. Human Resources

1. Program Director
   - An ESP Program Director provides oversight and day-to-day implementation of the program activities. This is an ideal role for:
     a) Individuals involved in academic advising – the ESP had its origin in academic advising since failing students are often overly dependent on others.
     b) Faculty in medical education departments – the ESP is ripe with opportunity for education research.
     c) Staff in areas related to student/teaching support – I have found in medical schools around the country motivated and informed staff who lack academic appointments but who have acquired an educational awareness.
   - The role of ESP Program Director can be shared as Co-Directors. This is a helpful arrangement when the program is first established as a means of troubleshooting unforeseen problems.
   - In general, because of the self-directed nature of the student activities and the coordination with the existing curriculum, there is minimal time commitment.
   - If a collaboration with the admissions office is possible, it would facilitate communication with participating students by maintaining a mailing list. Early communication with newly enrolled medical students is critical to their continuing their participation. Materials that would be emailed would include:
     - Prematriculation confirmations.
     - Newsletter updates and surveys.
2. Staff assistant
   - Day-to-day responsibilities typically in student affairs or admissions
   - eMail communication of initial program invitation as applicants accept admissions offers
   - Maintains email list for newsletters, research surveys
   - Minimal time commitment can be worked around normal duties

3. Faculty
   - Faculty are typically not needed since ESP utilizes a self-study approach to the current curriculum for its activities.
   - Faculty can assist on a one-time basis by helping to select questions to be used in the ESP Step 1 Prep question analysis sessions.
     - Selected questions should contain answer choices relevant to concepts on course exam questions.
     - Since the same questions can be re-used, this is a one-time only task; minor revisions are only needed if course content changes. (Note: It is critical that all question analysis practice questions be relevant to content that will be on the next course exam. Students are always aware that any time spent in Step 1 preparation counts as study time for the next exam.)
     - Faculty are only needed to screen questions for Year 1 Step 1 groups; year 2 groups do this for themselves.
   - Faculty support for the program is through deliberate practice during academic counseling.
     - Socratic questioning will reveal what the student doesn’t know.
     - Socratic questioning will also reveal critical thinking abilities.
   - Faculty ideally should have reviewed the prematriculation materials for ESP, but they will be more motivated when they find it can solve some of their teaching problems.

4. Peer mentors
   - Not required but helpful in maintaining continuity and reporting of progress
   - Possibility for year 3 and year 4 mentors to observe and motivate
   - Function of mentors similar to PBL tutors; only actively involved when needed
   - No preparation, but brief training may be helpful; standard set of guiding questions, e.g. “What else do you need to know? Does everyone agree?”

B. Media Resources

1. ESP website
   - Program description for both TTUHSC and nonTTUHSC participation
• Directions for entire program
• SuccessTypes book
• Practice questions for Step 1 Prep (password protected)
• Study guide for prematriculation self-study
• Printable template for side-to-side maps of case vignette questions

2. YouTube
• Prematriculation videos; links are at the ESP website

C. Physical Resources Needed
1. Small group meeting rooms, preferably reserved
   • Used for USMLE Step 1 Prep sessions
   • Normal scheduling at 5pm, but varies with curriculum schedule if openings exist during the day.
2. White boards, 8ft wide (for year 2 groups)
   • Used for side-to-side mapping of case vignette questions

What do I need to do and when do I do it?

Expert Skills Program Checklist

A. Admissions Interview Day
   1. One page description of ESP included in information packet. (see appendix A)
   2. Optional strategy: Include question on admissions application, “Are you aware of the Expert Skills Program at Texas Tech?” This will generate interest and more informed applicants by virtue of a perceived competitive advantage.

B. Block 1: Prematriculation Activities
   1. Student recruitment
      • Invitation email sent upon receipt of acceptance of offer of admission. Earlier response takes advantage of elevated mood of new student. (see appendix B)
      • Less likely to leave for a school with no ESP
   2. Confirmation of registration sent upon notification of interest from student
      • New registrants added to group email list.
      • New registrants added to spreadsheet communications checklist
      • All future communications sent to the list
      • Email provides starting directions and contact information (see appendix C)
   3. Follow-up email at about 2 weeks
      • Newsletter format
• What to expect
• Support for study guide
• Other comments as appropriate

4. Follow-up emails monthly
• Newsletter format with supportive information
• Commentary on ESP concepts
• Maintain understanding of uniqueness of ESP
• Information on orientation week with ESP Block 2 activities

5. Note that this block is also effective for students about to begin residency.

C. Block 2: Orientation workshops
  o Bring registrants to same experience level
  o Reinforce major concepts on skill development
  o Provide training in concept mapping for time management
  o Provide training in question analysis for critical thinking development

1. This Stage has been the most difficult to develop due to constraints with time during the orientation period.
  • A one hour Q&A with a slide set from the ESP website can serve as a recap of major concepts
  • Recap should bring in specifics about curriculum that will present challenges; provide advice on ways to avoid temptation to return to former learning habits (study partners, group participation, etc.).
  • Two 2-hour workshops are needed to train concept mapping and question analysis; check ESP website for materials.
  • Mentors can be recruited for question analysis groups during this workshop. Minimal training is required. Main emphasis is on keeping conversation going when it lags, not on “directing” the dialogue. Dialogue is usually very natural and only needs an occasional question. Training directions can be found in Appendix D.

2. Optional: concept mapping and question analysis can be taught on an as-needed basis, but the distraction caused by stress from the curriculum will limit the effectiveness.
  • I have had good results with concept mapping working one-on-one with the current course content and providing constructive feedback; always follow the Socratic rule when teaching students.
  • Question analysis groups will likely be formed to some extent as part of Block 3. Additional groups can be formed at any time and students can be trained within 30 minutes, again with current course content. Observation with feedback in the second session
will help refine the process. Normal development of thinking skills will be evident as the group becomes self-directed.

D. Block 3: Step 1 Prep

1. Organize groups from registered students; always offer unregistered students to join in.
   - If personality type is used to form groups, only the E/I and S/N types need to be in balance. An even balance is not critical.
   - Groups larger than 7 members will generally have a built-in balance due to random selection. Also, each type will be expressed differently in individuals due to development of proficiency in their opposite type skills.
   - It is important for groups to know each other’s type very early; asking each member to report how their type will help the group and benefit from the group always works well and helps the group develop cohesion more quickly.

2. Only schedule the first meeting and reserve rooms. Arrange for groups to determine their own schedule and authorize them to schedule their own rooms.

3. Use of resources for weekly review sessions must match topics in current week of the curriculum. At TTUHSC these are available password protected online. The same questions can be used again each year unless the curriculum changes; new questions should be easy to find.

4. Questions for Year 1 groups are not likely to be case vignettes since these require integration between courses and are best suited for Year 2. Ordinary exam questions work well.
   - The purpose for Year 1 is: a) to train students to utilize the thinking of their opposites; b) to carry over group thinking into individual study; c) to verify that their learning is accurate and correct; and d) to develop the group cohesion needed for more complex dialogue in Year 2.
   - The purpose for Year 2 is: a) to continue the development of integrative rationales; b) to develop long term memory of topics covered; and c) to develop skills that rule out incorrect answers.

5. Questions for Year 2 should be entirely case vignettes and should be acquired by the students. Maintenance of an item bank to save them time is good, but each group should determine for itself what is covered.
   - Choosing the questions for analysis develops self-directed learning and prepares the students for Year 3.
   - The emphasis should always be on the coverage provided by the answer choices.

E. Beyond Year 2
1. Clerkship directors can use the Step 1 Prep method in place of lectures
   - The teacher directs the dialogue instead of the students; follows attending rounds style of patient oriented teaching
   - Step 2CK questions are selected to match the topics that would have been covered by lecture.