

Preparing the ground: Inducting and sustaining instructors for the European Trauma Course

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A – research concept and design; B – collection and/or assembly of data; C – data analysis and interpretation; D – writing the article; E – critical revision of the article; F – final approval of the article

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I work as an educator supporting ETC Instructor Days and have contributed towards the ID development, including work towards a replacement of GIC requirements.

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Abstract

This paper describes the origins, structure and purposes for the instructor development programme (ID) initiated in support of the European Trauma Course (ETC) now taught throughout Europe, North Africa and recently, Brazil. The paper addresses the threefold focus for the programme: providing appropriate preparation and planning time with attendance to equipment and other logistical issues; revisiting relevant education theory to explore the why and how of ETC presentation; and the opportunity to develop a coherent sense of team membership arising from the diverse community of practice manifested among ETC instructors across Europe. The paper focuses on some of the challenges associated with group to team development and outlines some developmental strategies that emerge from a shared analysis of problematic issues in course presentation resulting from the complexity of trauma management in the clinical setting and how a course can adequately address those. The need for a systematic evaluation of instructor training is identified and possible strategies are briefly explored.

Key words: groups and teams, ETC Instructor training, programme evaluation, instructor faculty identity and performance

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Introduction

This paper is designed to provide the background and rationale for the current instructor preparation (Instructor Day (ID)), undertaken by instructors on the European Trauma Course (ETC) in the UK and other countries currently offering the course.

Background

As many readers will know, the ETC has been in existence since 2007^{1,2}, but had its intellectual origins earlier than that as emergency medicine and medical education colleagues began to express reservations about aspects of existing trauma training practice.^{3,4} Early manifestations of the course (notably Stavangar, Rome and Valetta) were characterised by high levels of instructor commitment and very positive responses from candidates but notably, also, by considerable variety in practice from workshop to workshop depending on who was facilitating a particular session. Intensive discussions followed these courses and the decision was made to include an instructor day to precede each ETC course with the specific intention of a) refreshing established instructors' understanding of the ETC approach and b) initiating newly recommended candidates identified as having instructor potential (IPs). The assumption was that all instructors would have had some exposure to instructor training, either through previous engagement as instructors in ATLS or through the Generic Instructors Course (GIC).

There is very little experimental evidence to suggest that an instructor course of any type has positive outcomes but it is true to say that the designers of the ETC all shared a common background in the variety of life support courses that subscribed to the view that instructor training had value. There is a considerable body of low-level evaluation evidence from organisations like ALSG and RC(UK) (shared GIC) and Royal College of Surgeons of England who support ATLS in UK and internationally, that their instructor courses are seen as valuable contributors to instructor confidence and competence. The most visible accolade comes from a short paper published in the *BMJ* (Brand, 2008) that concluded: "This [GIC] was fantastic—it was one of the hardest that I have had to complete. In return, I learnt so much and gained numerous transferable teaching skills that I can now apply to any teaching situation. My ability to assess individual performance objectively has also improved greatly as a result of this course. I would recommend this course to all who have been nominated for it."⁵

The ETC ID, therefore, was intended to build on some shared background insight and understanding of a structured approach to teaching and to provide a shared context for the course to follow. This would involve two distinct elements: 1. Revisiting some key educational principles of particular relevance to ETC, 2. Providing preparation and "walk-through" practice opportunities. The former

is designed to relate theory to practice and to tease out some of the challenges inherent in a team approach; the latter to achieve everything from the relatively mundane ("Do we have everything we need?") to the vitally important distributions of responsibility and reinforcement of course expectations. All of these components contribute towards an effective "community of practice"⁶, a key ingredient of ETC, described in the online reader for new instructors as: "... [where] values and expectations reveal themselves in distributed space, for example, when successful participants return to their work places. The ETC community of practice is characterised by shared approaches to trauma and a degree of commitment to the ETC course process ..."⁷ This is, of course, an aspiration for the final outcome and an appropriate course has to reflect this.

Course design

Based on development work conducted by a small group of ETC educators^a (meetings and correspondence 2015–2018), the intended outcomes for the ID are that all instructors could: 1. perform the roles of lead instructor and insider, including management of information flow; 2. demonstrate technical skills teaching with the modified four stage technique; 3. manage a structured debrief using the learning conversation, including attention to NTS; 4. describe the assessment process.

At the time of writing, there is only informal evidence that this is a model that all course centres subscribe to. The programme and its associated rationale was approved by relevant ETC working groups but there is no formal obligation for centres to follow it and it may be that courses, where they are offered, are adjusted to accommodate particular local circumstances which might vary from centre to centre and country to country, depending on a variety of factors including instructor experience and familiarity.

This most recent version of the programme offered in UK centres, however, reflects the outcomes listed above and it is true to say that as time has gone by, the amount of formal input has reduced and the focus now is much more on the analytic (i.e. specifically problematising the nature of the experience) and the practical as illustrated in the following outline programme (Table 1).

This approach is premised on the expectation that all instructors and ICs have been exposed to the appropriate preparation: 1. being instructors on other life support courses (ATLS, GIC), or 2. having had training under the auspices of clinical specialties (e.g. Royal College courses in UK) and supported by pre-course reading: ETC manual (specifically Chapter 1)⁸; ETC Instructor Course: pre-course reading for instructor candidates (2nd edition).⁷

The formal input into the instructor course content is designed to revisit, in very general terms, the theoretical perspectives explored in the pre-course reading from which the ETC draws for its curriculum design: 1. learning from

Table 1. Structure and content of the ID: A draft outline and aspiration

Learning Outcomes	
By the end of the day, faculty will be able to demonstrate a consistent approach to workshops, including:	
Instruction	<ul style="list-style-type: none"> • preparation of workshop • workshop management of team leader and team members • time management • feedback
Assessment	<ul style="list-style-type: none"> • formative • summative
Programme	
15 min	Welcome & Introduction
60 min	Educational rationale of ETC
30 min	How to run a workshop (including optional Demo: Running a workshop, managing information flow)
60 min	Prepare first workshop
60 min	Prepare second workshop
60 min	Demo: Feedback/Learning Conversation
20 min	Assessment issues (including optional Demo: applying criteria)
30 min	Prepare third workshop
15 min	Summary & close

experience; 2. social constructivism; 3. situated learning and activity theory; 4. group dynamics and then to focus on identifying issues of concern, specifically through an exploration of the nature of the ETC candidates and what they bring to the ETC course, and how the course currently responds to those elements. The purpose of engaging in this is to provide the instructor community with a focus for shared, but possibly unstated concerns. These can have an impact on both established and new instructors as they tease out the implications of the relationship of the course to candidates’ needs and the needs of trauma management in the clinical settings. These discussions allow faculty to identify challenges and possible solutions (short and longer term) and also, importantly, lay the foundations for an effective team to emerge from the group that came together as faculty.

In practical terms, the first two of the theoretical perspectives have a strong degree of taken-for-grantedness about them, particularly reflected in the course design, through the 40+ workshop topics that candidates collectively explore through their 2.5 days. Learning from experience is at the heart of the process, as is the assumption that candidates bring a degree of prior experience to the course from their work-based practice: it is generally expected that candidates will have a degree of seniority (doctors above ST3, nurses and OPDs Band 6 and above and more experienced paramedics).

Accordingly, the input is a focus on group dynamics and situated learning, with the intention of addressing the complex challenges of enabling groups to evolve into effective teams, and by providing an appropriate focus for formative assessment and associated debrief and feedback. Invariably,

there is some brief discussion with the course director about the level of experience within the faculty (including the number of IC1 and IC2s on the course), and this impacts on some of the emphasis for the organisation of the ID.

While there is a brief revisiting of material addressed in pre-course reading, the main focus of activity is through a dynamic exploration of issues of concern for team performance and how ETC faculty and candidates can contribute effective solutions to the identified challenges. This element is undertaken in small groups (4–6 people) and encourages the emergence of effective and productive norms of behaviour: a major target of the ETC itself. The ostensible focus of this activity is an exploration of the challenge by using one of two analytical tools (force field analysis⁹, SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis).¹⁰ The additional powerful outcome, however, is the experiential exploration of group formation and the development of productive norms, including close collaboration, shared problem solving, open communication and effective leadership and membership.

Table 2. Approaches to ID content

Formal input	Problem solving/ analysing	Practical
Revisiting key principles	SWOT ⁹ analysis	workshop demonstrations
Structure of an ETC workshop	force field analysis	preparation for workshops (days 1 and 2)
Managing candidate experience	Role plays: feedback/formative assessment mentoring	

The development of a cohesive and coherent faculty group is an essential ingredient of a successful course through the process of modelling good practice and providing a secure base from which to initiate and sustain practice within the limitations of simulated environments. These are key considerations in the success of the subsequent ETC and deserve closer attention.

From group to team

Creating and maintaining an effective and efficient team, from a larger and diverse group, to manage trauma is a significant challenge and one of the target outcomes of the ETC. A similar challenge exists in enabling an effective faculty to come together to offer a coherent and consistent experience for candidates. Among the responsibilities of the ID is to establish a productive culture that is capable of offering a model for the teams given the responsibility for managing the sequence of workshops.

The key step in enabling this process is the development of productive norms, something that is explored in the course pre-reading⁷ and which is characterised as “Work”, as opposed to avoidance strategies, called by Bion¹¹ “Basic assumptions”, described as: 1. dependency, in which a group

becomes passive and looks to be rescued from confusion and uncertainty; 2. pairing, a variant of dependency, when the group turns to a significant pair who are seen as an idealised source for producing a solution for the group's problems, through an inspired leader to be dependent upon; 3. fight/flight, a more volatile assumption in which the group acts as if resisting, undermining or avoiding the task are the only alternatives. Any one of these basic assumptions can generate behaviours which make effective team performance problematic and while the consequences of this among candidate teams are limited by the fact that the level of engagement in a simulated clinical case, the implications of an ineffective faculty is more profound, and impacts negatively on the course experience for all participants.

An effective ID, therefore, is designed to contribute in a variety of ways to successful outcomes for the ETC as a whole, in terms of preparation and revisiting key educational issues but also enables the successful emergence of productive norms and together, these form the basis of a successful presentation of the course.

Course evaluation

The course itself has been evaluated since its earliest days and, in terms of candidate satisfaction, it has received significant recognition as making a valuable contribution towards trauma management across its community. How that manifests itself in the workplace is a little more elusive as all course designers appreciate, but ETC's continued success against the background of other demands (including mandated training) is an indication of the reputation it has gained for itself.

The ID itself continues to gain good reviews from participants from end of course evaluations: there is a considerable majority of the opinion that the ID is an excellent preparation for teaching on the course and meeting the need to refresh an approach that they may only have the opportunity to practice once or twice per year. While these evaluations are a source of encouragement, they are acknowledged as being low level (Reaction and self-reported learning).¹² As already indicated, instructor performance is notable for its high quality, according to candidate evaluations completed at the end of courses: the median score for workshop management throughout the course is 4 on a scale of 1–4.¹³ and comments like "... excellent and credible faculty" are not uncommon.

Impact and significance

This is an area which has been more difficult to capture, given the diverse populations and the varieties of other trauma management training provision available in partner countries. Indeed, trauma training and the ETC in itself have been exposed to virtually no systematic inquiry in recent years: a search of all of the medical and medical education databases produced no mentions of the ETC

other than those articles^{1–4} written by members of the early development group that are now part of the educational package associated with ETC. To some extent, this is also true of the wide variety of life support courses offered under the auspices of ERC, RC(UK), ALSG and ACS (responsible world-wide for ATLS programme).

Next steps

A more complex evaluation of the impact of ETC on trauma management is an important next step for all of the communities currently teaching trauma. This would feed into the existing ongoing course development by the educational group responsible for monitoring its design and presentation so that it remains relevant and capable of meeting complex technical and non-technical needs. As it stands, relatively simple evaluation models that address Kirkpatrick's lower levels, combined with anecdotal evidence and ongoing patterns of demand suggest that all aspects of the course are doing a very good job of preparing and sustaining the variety of professionals involved in managing trauma. However, we have to acknowledge the widely quoted view that multiple anecdotes are not data.

Inevitably, any evaluation of the ETC itself would reflect on the continued viability and fitness for purpose of the ID and a separate, detailed evaluation study, based on course observation, questionnaires and interviews would contribute towards an assessment of its utility and effectiveness. This is an aspiration.

An appropriate model of evaluation for all elements would involve mixed data collection methods that allow for an assessment of the impact of the course on technical and non-technical behaviours in trauma management and this might include some reference to patient outcomes. The complexity of gaining access to higher level data, however, precludes a more "objective" research design (i.e., a requirement of the upper end of the Kirkpatrick hierarchy), seeking instead, "clarification" as to the extent a programme has achieved its intentions. The approach adopted, therefore, would be based on this model:

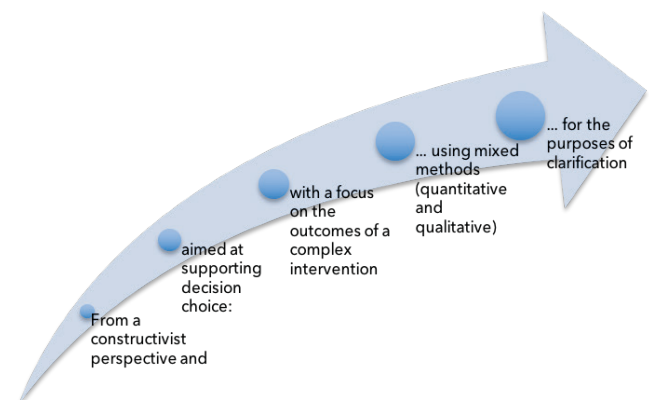


Fig. 1. Framework for evaluation of complex intervention (after Yardley & Dornan¹⁴)

Conclusions

Instructor training can be a somewhat invisible and rarely discussed feature of life support course provision, but without it, this paper argues, the quality of the learning experience would be more variable both in content and quality. Over the past 12 years, ongoing efforts have been made to sustain a standard approach to the educational experience, even against a background of local variations in trauma practice. Attempts to develop and sustain a standard model across 21 countries and over 100 centres has been a challenge, but one that has been welcomed and supported by the international body overseeing ETC. It is worthy of a systematic and thorough evaluation based on the Yardley & Dornan model outlined above. This paper is a first step in encouraging the ETC community to engage in this process.

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