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Evidence-informed practice learning and assessment framework for clinicians working with students on placement

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The initial framework and resources were developed by [Dr Kylie Murphy](#), [Dr Tracey Parnell](#), [Associate Professor Narelle Patton](#), [Dr Kate Freire](#) and [Professor Rod Pope](#). The framework and resources were updated by [Elsie de Klerk](#) (Three Rivers Department of Rural Health) with the support of the original authors.

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Introduction

In 2019, Charles Sturt University was sponsored by the [Australian and New Zealand Association for Health Professional Educators](#) (ANZAHPE) to develop an Evidence-Based Practice (EBP) learning and assessment framework to address an identified lack of guidance for clinical placement supervisors (Murphy et al., 2019). An important aim was to address the lack of shared understanding between students, academics, and placement supervisors about the principles and steps involved in high-quality EBP.

Our work on this project was inspired and guided by contemporary EBP scholarship. At the core of healthcare professional practice is the ethical aim of achieving optimal outcomes for clients in their unique circumstances. We need not only good healthcare practitioners but healthcare practitioners who will do good. We developed a framework to support clinicians working with students to help them apply EBP during their clinical placements.

Scholars continue to refine and reflect on the concept of EBP and its application (Murphy et al., 2019). Some question how effectively evidence is applied in practice as part of the EBP process (Harrison & Graham, 2021; Kumah et al., 2022). Others suggest that the focus on research evidence dominates EBP, resulting in neglect to consider other legitimate sources of information and contextual factors (Burns, 2023; Harrison & Graham, 2021).

Evidence-Informed Practice (EIP) has been suggested as an alternative term to reflect a more holistic approach, and we prefer to use this term in this updated edition of our framework. We believe that optimal client outcomes are achieved when healthcare practitioners take a broad view of the circumstances and most likely consequences of possible actions and conscientiously and collaboratively determine what is best to do before acting. EIP provides a framework to guide critically reflective decision-making and the provision of client-centred, situationally appropriate, safe, and effective healthcare.

The way EIP occurs will differ between professionals at different levels of experience. Compared with more experienced practitioners, students and new graduates may need to engage more frequently and consciously in the EIP processes as they develop mastery within their scope of practice. However, for all practitioners, we believe an EIP approach is essential to good practice. We hope the framework we have developed in this project will assist more health practitioners in capitalising on the full potential of EIP to do good.

In true EIP spirit, in developing this framework, we drew on the best available literature, our own professional experience, and the experience-based perspectives of three important stakeholder groups: students, academics, and placement supervisors. We also regularly engaged in collegial critical-reasoning discussions and in-depth reflection. We are delighted to share the results of this process.

Please contact us at ThreeRiversDRH@csu.edu.au with any feedback or suggestions.

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What is evidence-informed practice?

The meaning of both EBP and EIP has evolved over time in response to legitimate criticisms. EIP means applying 'good quality evidence' (Harrison & Graham, 2021, p. 1) to enable ethical and well-informed practice (Staempfli, 2020). 'Good quality evidence' can be thought of as any credible information that increases confidence in a particular answer to a question. It is not limited to research and theories but also includes public, personal, organisational, cultural and discipline-specific knowledge, professional expertise and lived experience. This knowledge and experience are thoughtfully applied against the backdrop of the specific local context (Markauskaite & Goodyear, 2017; Staempfli, 2020). Different kinds of information can be relevant, depending on the kind of question being asked.

Context is a central consideration in high-quality EIP. Decisions should always be made in accordance with the resourcing constraints that apply and the socio-cultural and geographical context. Regardless of the nature of the question or the context, EIP is a conscientiously considered systematic process.

We developed this framework using the five steps suggested by Dawes et al. (2005) for EBP, including asking, acquiring, appraising, applying and analysing.

EIP and mastery development

Done well, EIP supports clinical reasoning and development of clinical mastery within a practitioner's scope of practice. Early in their professional development, students and practitioners will need, and should be expected, to ask lots of questions and work through EIP processes to build their clinical practice knowledge, understanding and capabilities.

As mastery develops, much of this underpinning knowledge, understanding and capability becomes 'second nature' and more automatically applied, and variants from typical presentations and care contexts will more likely trigger EIP processes. At more advanced stages of mastery, EIP processes may be used to stay abreast of new developments and emerging knowledge in the practitioner's field, to challenge assumptions, and to fine-tune clinical reasoning, as well as to determine how best to respond to variants from typical presentations and care contexts. Thus, EIP is relevant at every stage in the journey of clinical mastery.

The guidance provided in this framework is intended to assist students to develop an EIP habit that will serve them well throughout that whole journey.

Why this framework?

During their clinical placements, all students in accredited health professions must be assessed on their EIP capabilities by the clinicians who supervise them (Kumah et al., 2022). Depending on the profession, competence-assessment tools used by clinicians supervising students vary. Different EIP-related terminology and rating scales may be used. However, regardless of the particular profession, the steps to facilitate EIP remain consistent.

Given that EIP is already being assessed by clinical supervisors, what does this framework add?

This framework describes, in practical terms, the steps involved in EIP. It aims to promote a shared understanding between healthcare students, academics, and placement supervisors across health professions about how EIP is achieved in clinical practice.

Importantly, this framework also highlights the importance of *facilitating* before *assessing* students' EIP proficiency. This framework assists clinicians in their student-supervision role by suggesting practical ways to provide students with:

- prompts and guidance to *learn how* to engage in EIP
- opportunities to *demonstrate* their EIP abilities for assessment purposes.

Printable resources include a [poster showing the five steps](#), a [summary of prompts](#) sheet and a selection of [reflective questions](#) sheet that can be used with students. These resources are also available at the end of this document.

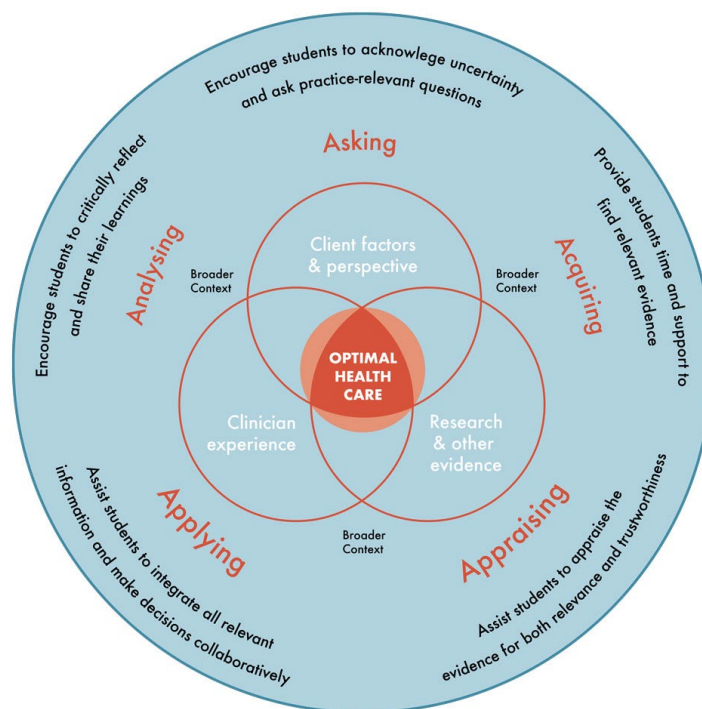
The EIP learning and assessment framework

EIP means engaging in five steps as a way of practicing: asking, acquiring, appraising, applying, and analysing. Our framework highlights the factors that need to be considered when engaging in those steps to achieve high-quality EIP.

EIP always seeks relevant, reliable information (e.g. research evidence, clinical guidelines, cultural knowledge) to inform healthcare decision-making. Quality EIP happens when this information is integrated with all other relevant considerations, such as the client's situation and perspective and one's own training and clinical experience. The broader geographical, socio-economic, and cultural context is also important to consider.

Reflective questions can help prompt reflection and help students, supervisors and academics work together to develop a collaborative understanding of the context of the placement, the student's role in the setting, and the student's learning journey. This understanding will help the student to situate and identify how they will engage with the evidence-informed process throughout the placement. It is recommended that this reflection occur before or early in the placement. A document outlining relevant contextual considerations is also available from the website.

Students on placement need opportunities to learn *how* to do each step well and to *demonstrate* that learning. The tips in this document assist supervisors in facilitating and assessing students' EIP learning, one step at a time.



1. Asking

Encourage students to acknowledge uncertainty and ask practice-relevant questions.

EIP starts with 'asking' questions in situations where there is uncertainty about how best to proceed. Such situations are opportunities – indeed imperatives – for EIP. Questions suggesting a poor grasp of basic facts (for example, definitions) are not EIP questions; students sometimes simply need to strengthen their understanding of foundational concepts. Questions based on curiosity alone are also not EIP questions but may be a starting point.

EIP questions are questions that are asked so that practitioners and clients can make healthcare decisions that are well-founded on relevant information. EIP depends on practitioners raising questions, and also encouraging their colleagues and clients to ask questions, to ensure healthcare decisions are well informed.

A client has the right to be informed about their healthcare options (e.g., the pros and cons of a diagnostic test, or the odds of recovery with versus without a certain treatment) and factors affecting their health outcomes. To enable efficient information gathering (in the second step of 'acquiring'), practitioners must be proficient in formulating questions that target the precise information needed.

In summary, EIP begins with asking questions that are relevant to decisions that need to be made in specific clinical scenarios. EIP flourishes when a questioning approach to practice is encouraged.

Prompts for facilitating 'Asking'

- What is it you are unsure about in this situation?
- Does this uncertainty affect your (client's) decision-making? Why?
- Is it possible that helpful information exists?
- What precisely do you need to find out to make the best decision?
- What is the specific question you need to answer?

Prompts for assessing 'Asking'

- What situations of uncertainty have you encountered?
- What specific EIP questions have you asked?
- Take one example: Why did you need to answer that EIP question? How was it important for your decision-making?

General tips and strategies for 'Asking'

- Most EIP questions refer to a relevant health condition, desired outcome, and population group. There may or may not be a particular intervention or diagnostic test of interest. For example, the question may instead be about whether *any* intervention is effective in particular circumstances, or the challenges and concerns experienced by people living with a particular condition, or the likely progression of an illness *without* intervention, or the cultural beliefs and expectations of a person.
- If answering a question will not affect decision-making, it is not an EIP question in that context.
- During busy periods, EIP questions can be easily forgotten and never followed up. A log of questions can be kept for later follow-up.
- Questions can be collated by clinical teams, for follow-up during quieter periods or as suggestions for student presentations.

2. Acquiring

Provide students time and support to find relevant evidence.

'Acquiring' relevant evidence involves first identifying the *type* of information required to address the question. Is the most current research evidence likely to be helpful (for example, to find the best diagnostic test for a particular condition with a particular patient type)? Is a reputable website or textbook more likely to provide the information needed (for example, to learn about the nature and symptoms of a particular condition)? Is there a need to access published information at all? Perhaps the question requires information to be sought orally from a patient, a carer, community leaders or representatives, another practitioner, or another agency.

After the information needs are clearly identified, a strategy is needed to ensure the most trustworthy available evidence is obtained in the most efficient way possible. Expert assistance from a health librarian might be helpful if the question calls for published evidence.

Prompts for facilitating 'Acquiring'

- What kind(s) of information might assist?
- Where might you find that information?
- Who might be able to help?
- How will you find the information in the most efficient way?

Prompts for assessing 'Acquiring'

- What types of information have you acquired to inform your practice?
- Where or how did you source that information?
- Did you have any difficulties? How did you try to overcome the difficulty?

General tips and strategies for 'Acquiring'

- Consider the broad range of information types and resources that might help to answer the question.
- Check to see if your workplace provides access to a health librarian if help is needed to use a research database.
- Consider the timing. Non-urgent questions should not be raised in times when more urgent tasks need attention. Keeping a list of EIP questions means that non-urgent questions can be returned to at a less busy time.
- If a research database is searched, keep track of the search strategies used, so effective searches can be returned to later and less effective searches can be refined.
- Rapid answers can sometimes be obtained by asking practitioners with a high level of clinical mastery in the particular field of practice, or the person for whom care is being provided.
- Time should be regularly set aside for acquiring evidence that responds to questions identified in clinical practice. Students and recent graduates particularly will benefit from regularly scheduled time (e.g., daily) to discuss with peers and/or educators the types of people and conditions they have encountered, questions that have arisen about the care they are providing, and the sources and types of information they have so far acquired to answer those questions.

3. Appraising

Assist students to appraise the evidence for both relevance and trustworthiness.

Depending on the EIP question, the acquired evidence may specifically and comprehensively address the question, and it may be clearly trustworthy; or the evidence may require some level of critical appraisal to determine how relevant it is to the original situation and/or how trustworthy it is.

Prompts for facilitating 'Appraising'

- How relevant to your situation is the information you've acquired?
- How are you judging the relevance?
- How trustworthy is the information you've acquired?
- How are you judging the trustworthiness?
- Would a critical appraisal tool be helpful for appraising this information? Why or why not?

Prompts for assessing 'Appraising'

- Why did you judge the information was relevant enough?
- Why did you judge the information was trustworthy enough?
- Alternatively, why were you sure there *was no* relevant or trustworthy evidence to answer your question?
- If you used a critical appraisal tool, what conclusion did you reach about the quality of the evidence? What were the main factors you considered?

General tips and strategies for 'Appraising'

The following websites contain a range of critical appraisal tools that can help practitioners learn to critically appraise the trustworthiness of different kinds of research evidence:

<https://casp-uk.net/casp-tools-checklists/>

<https://www.understandinghealthresearch.org/>

4. Applying

Assist students to integrate all relevant information and make decisions collaboratively.

The step of 'Applying' in EIP can be an intellectually complex step, requiring the integration of multiple factors and perspectives. When deciding how to act on information that has been acquired, relevant personal details and perspectives must be considered (e.g. socio-cultural factors) along with relevant clinical experience and context-specific resources and constraints. Organisational culture is critical because it can either enable or hinder appropriate EIP decision-making and actions. For example, an EIP process may indicate that an existing protocol should be updated; ideally, an organisation will be responsive to the best evidence currently available. Critical reasoning and collaboration are required to ensure that any EIP decision is realistic in the given setting, client-centred, optimal and ethical.

Prompts for facilitating 'Applying'

- What situational factors, resources, and constraints need to be considered in deciding how to act on the information?
- Whose perspectives do you need to consider when deciding how to proceed?

- What aspects of the information need to be explained to each stakeholder?
- When and how will you explain the information to each stakeholder?

Prompts for assessing 'Applying'

- How did you act on the information you acquired, and why?
- How did you inform and collaborate with others (e.g. clients, other practitioners, managers, other stakeholders) in deciding how to act?
- Can you give an example of where you have integrated evidence with *client* perspectives in determining care?

General tips and strategies for 'Applying'

- Consider the entire context of the situation (including socio-cultural factors and practical constraints) prior to deciding how to act on acquired information.
- Appropriately tailored communication with all stakeholders is important, to ensure that EIP decisions are realistic, client-centred, and ethical.
- Placement supervisors can model elements of the step of Applying by discussing case studies with their students (e.g., client factors, relevant literature, and broader considerations). For experienced clinicians, this step is often conducted without explicit awareness. Talking about considerations aloud can be helpful to one's own practice and to the student who is learning from this modelling.

5. Analysing

Encourage students to critically reflect and share their learnings.

High-quality EIP involves pausing to evaluate the quality of our information-seeking and decision-making processes and the resultant outcomes. Whose perspective is most important to consider; and from that perspective was the EIP process successful? Whether or not the overall outcome can be considered optimal, EIP should generate practice knowledge. It is important that this practice-derived knowledge is explicitly reflected upon, shared with other practitioners as relevant, and used to inform future practice.

Prompts for facilitating 'Analysing'

- What strengths and weaknesses are you showing in this EIP process?
- What will you consider a positive outcome, and why?
- How will you know the outcome?
- Who and how might it help to share your EIP learnings?
- Are there any new questions arising from this EIP process?

Prompts for assessing 'Analysing'

- What have you learned as a result of this EIP process?
- How will this new knowledge inform your future clinical practice?
- How have you shared your new practice knowledge for wider benefit?

General tips and strategies for 'Analysing'

- Remain cognisant of the intended beneficiaries and stakeholders in the EIP process, why the perspective of each person/group matters, and what each person/group would consider to be a positive outcome.
- Critical, reflective practice is part of high-quality EIP. Throughout the EIP process, continually reflect on your own learning and changes to your clinical practice.
- Use established forums and incidental opportunities to inform other practitioners of your EIP learnings and to support others in critically reflecting on their own EIP.
- 'Student huddles' can be facilitated by clinical educators to promote a culture of reflection and sharing related to EIP.

Further reading

Alla, K., & Joss, N. (2021). What is an evidence-informed approach to practice and why is it important? <https://aifs.gov.au/resources/short-articles/what-evidence-informed-approach-practice-and-why-it-important>

Charles Sturt University library guide on EBP: <https://libguides.csu.edu.au/ebp>

Harrison, M. B., & Graham, I. D. (2021). *Knowledge translation in nursing and healthcare: a roadmap to evidence-informed practice*. John Wiley & Sons, Inc.

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7. Staempfli, A. (2020). *PSDP - Resources and tools: Enabling evidence-informed practice*. Department for Education. <https://practice-supervisors.rip.org.uk/>

Resources



Evidence-informed practice (EIP) learning and assessment framework for clinicians working with students on placement

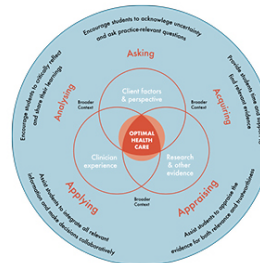
	FACILITATING students' EIP learning	ASSESSING students' EIP learning
Asking	<ul style="list-style-type: none"> • What are unsure about in this situation? • Does this uncertainty affect your (client's) decision-making? Why? • Is it possible that helpful information exists? • What precisely do you need to find out to make the best decision? • What is the specific question you need to answer? 	<ul style="list-style-type: none"> • What situations of uncertainty have you encountered? • What specific EIP questions have you asked? • Take one example: Why did you need to answer that EIP question? How was it important for your decision making?
Acquiring	<ul style="list-style-type: none"> • What kind(s) of information might assist? • Where might you find that information? • Who might be able to help? • How will you find the information most efficiently? 	<ul style="list-style-type: none"> • What types of information have you acquired to inform your practice? • Where or how did you source that information? • Did you have any difficulties? How did you try to overcome the difficulty?
Appraising	<ul style="list-style-type: none"> • How relevant to your situation is the information you've acquired? • How are you judging the relevance? • How trustworthy is the information you've acquired? How are you judging the trustworthiness? • Would a critical appraisal tool help appraise this information? Why or why not? 	<ul style="list-style-type: none"> • Why did you judge the information to be relevant enough? • Why did you judge the information was trustworthy enough? • Alternatively, why were you sure there was no relevant or trustworthy evidence to answer your question? • If you used a critical appraisal tool, what conclusion did you reach about the quality of the evidence? What were the main factors you considered?
Applying	<ul style="list-style-type: none"> • What situational factors, resources, and constraints need to be considered in deciding how to act on the information? • Whose perspectives do you need to consider when deciding how to proceed? • What aspects of the information need to be explained to each stakeholder? • When and how will you explain the information to each stakeholder? 	<ul style="list-style-type: none"> • How did you act on the information you acquired, and why? • How did you inform and collaborate with others (e.g. clients, other practitioners, managers, other stakeholders) in deciding how to act? • Can you give an example of where you have integrated evidence with client perspectives in determining care?
Analysing	<ul style="list-style-type: none"> • What strengths and weaknesses are you showing in this EIP process? • What will you consider a positive outcome, and why? • How will you know the outcome? • Who and how might it help, to share your EIP learnings? • Are there any new questions arising from this EIP process? 	<ul style="list-style-type: none"> • What have you learned as a result of this EIP process? • How will this new knowledge inform your future clinical practice? • How have you shared your new practice knowledge for wider benefit?

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Visit threeivers.csu.edu.au/eip for more information and resources.

[Download this EIP summary of prompts sheet as a PDF.](#)

Is Evidence-Informed Practice *happening*?



Asking

Do students and practitioners feel free to ask questions?
Are they assisted to formulate practice-relevant questions?

Acquiring

Do students and practitioners find evidence on their questions?
Is time and support provided for finding relevant evidence?

Appraising

Is the evidence appraised for both relevance and trustworthiness?
Are evidence appraisal skills actively developed and encouraged?

Applying

Is the evidence integrated with other relevant factors and perspectives?
Is there opportunity to act appropriately on evidence?

Analysing

Are evidence-based practice steps and outcomes critically evaluated?
Are the learnings used to inform future practice?

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[Download this EIP poster showing the five steps as a PDF.](#)

Reflective questions

These questions are designed to prompt reflection and help students, supervisors/clinical educators and academics work together to develop a collaborative understanding of the context of the placement, the student's role in the setting, and the student's learning journey. This understanding will help the student to situate and identify how they will engage with the evidence-informed process throughout the placement. It is recommended that this reflection occur before or early in the placement.

Understanding the broader context

Where is the setting located (geographically)?

- Consider metro, regional, rural, remote.
- Are services delivered on one site or multiple sites? If multiple sites, will the student be working on multiple sites?

Explore the complexity of the setting. (Consider acuity, diversity, cultures, ages, diagnoses, etc.)

What is the pace of the work the student will be engaged in? (For example, consider differences between surgical ward, ED, rehabilitation, community-based, residential care, etc.)

How is the service funded?

What is the governance structure of the service?

Explore resource availability within the placement setting and the community more broadly.

What is the student's role in this setting?

Student's learning journey

Reflect on previous life experiences that may influence engagement in the placement.

Consider previous placement experiences and how these may influence success on this placement.

What are the student's current skills and knowledge, and what else do they need to know within boundaries of professional scope?

What are the student's goals for this placement?

Are there any other factors that may impact the student's success on this placement?

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