

Assessing whether evidence is relevant to your context

For educators, teachers and leaders

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It's common to wonder whether evidence from research or from other educators or teachers applies to your context. Perhaps the evidence is from a different type of community (regional or remote versus metropolitan), a different type of school (primary versus secondary) or service (family day care versus long day care centre) or with different children (high versus low socio-economic status). Given these differences, how do you know whether a practice or program supported by research will also be effective in your school or service?

Concerns about context shouldn't stop you from engaging with research that has strong potential to transform your practice.

This practice resource is designed to help you reflect on and decide whether a piece of evidence is relevant to your context – and therefore, whether the corresponding approach is likely to be effective in your school or service. You can do this by following the process in [Figure 1](#), along with the step-by-step instructions for assessing the relevance of evidence.

The Australian Education Research Organisation (AERO) wrote about the relationship between evidence and context, in our article '[But That Would Never Work Here](#)' – Does Context Matter More Than Evidence?. In this article, we focused on 3 education practices – formative assessment, explicit instruction and mastery learning – and examined whether context influences their effectiveness. We found that all 3 practices are likely to work across different contexts.

Related frameworks

Early Years Learning Framework V2.0

Principles: Critical reflection and ongoing professional learning.

National Quality Standards

Standard 7.2 Leadership: Effective leadership builds and promotes a positive organisational culture and professional learning community.

Australian Professional Standards for Teachers

Focus Area 6.2: Engage in professional learning and improve practice, which includes 'Plan for professional learning by accessing and critiquing relevant research' at the Highly Accomplished level.

Australian Professional Standards for Principals

Professional Practice 2: Developing self and others.

Ways to use this resource

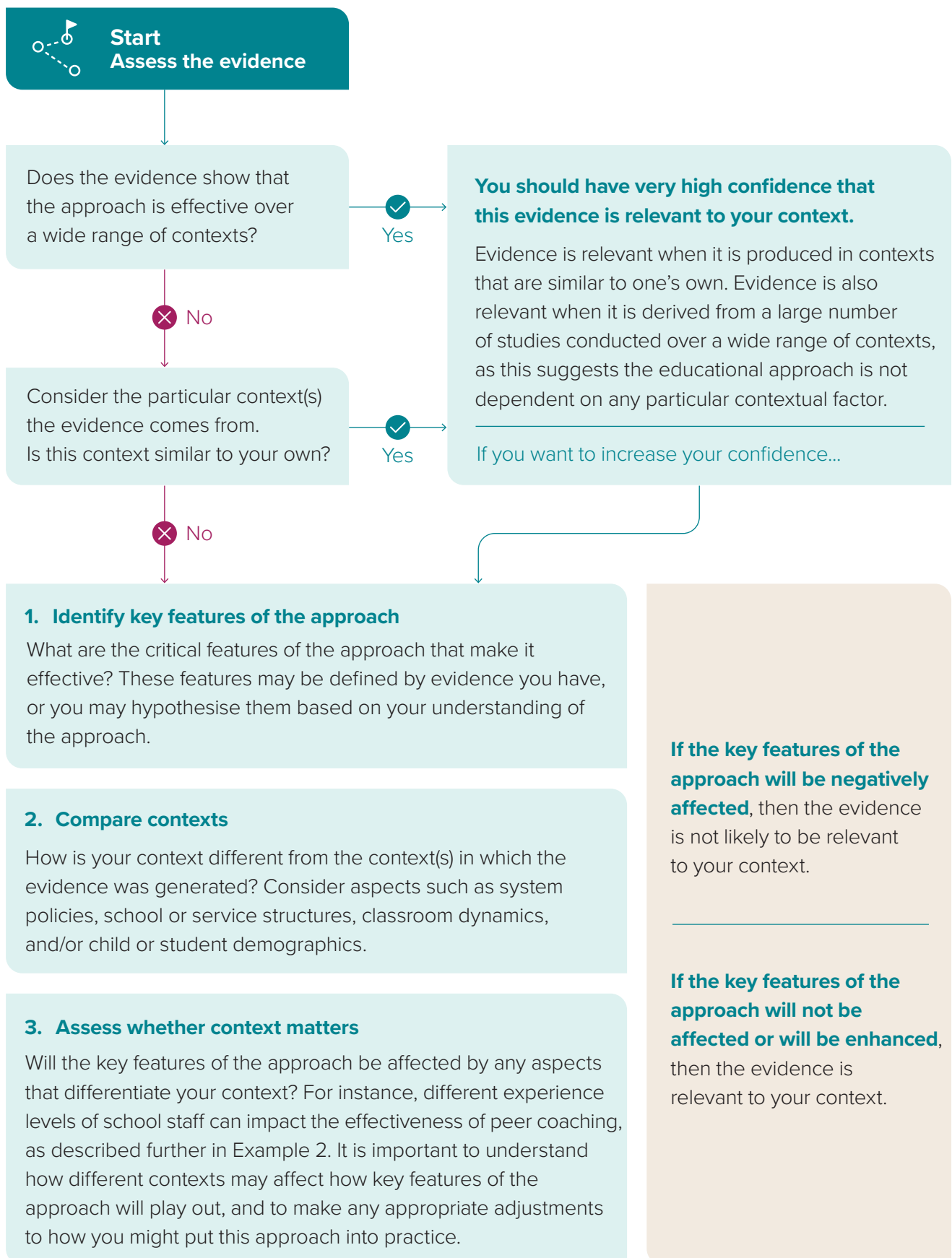
- Personal professional learning to reflect on evidence to inform your practice.
- Professional learning in a group, such as a community of practice – use this resource to discuss the relevance of evidence as a team.
- If you are a leader in your school or service, you can use this guide to structure dialogue and reflection about research evidence. The concepts described can serve as a point of conversation to build shared understandings of how to assess the relevance of evidence.

Assessing relevance

To reflect on whether a piece of evidence about an education approach (practice or program) is relevant to your context, follow the process in [Figure 1](#) along with the step-by-step instructions. The 3 examples provide more guidance on how to work through the process.



Figure 1: Process for assessing relevance



Start by assessing the evidence. Does the evidence show that the approach is effective over a wide range of contexts?

- If yes, then you should have very high confidence that this evidence is relevant to your context.
- **If the evidence doesn't show that the approach is effective over a wide range of contexts, then consider the particular contexts the evidence comes from.**
Are there similar system policies, school or service structures, classroom dynamics and/or child/student demographics?
 - If yes, you should have very high confidence that this evidence is relevant to your context.
 - If no, then follow the 3 steps to assess the relevance of the evidence to your context.

Step 1: Identify the key features of the approach that make it effective. These features may be defined by evidence you have, or you may hypothesise them based on your understanding of the approach.

Step 2: Compare contexts to identify how your context is different from the context(s) in which the evidence was generated. Consider aspects such as system policies, school or service structures, classroom dynamics and/or child/student demographics.

- Step 3: Assess whether context matters** by considering whether the key features of the approach will be affected by any of the main aspects that make your context different to the context in which the evidence was generated.
- If the key features will be negatively affected, then the evidence is not likely to be relevant to your context.
 - If the key features will not be affected or will be enhanced, then the evidence is relevant to your context.

Example 1: Formative assessment (assessment for learning)

Alice, a teacher at a secondary school, is interested in understanding whether the evidence on formative assessment (assessment for learning) is relevant to her own classroom context.

Assess the evidence

Alice reads AERO's [Formative Assessment practice guide](#) and [associated resources](#) and notes that they're based on multiple reviews of a large number of studies conducted over a wide range of contexts. This suggests the effectiveness of formative assessment doesn't depend on any particular contextual factor, so Alice concludes that she should have very high confidence that the evidence on formative assessment is also relevant to her context.

Identify key features of the approach

Even though Alice has very high confidence that the evidence on formative assessment is relevant to her context, she wants to increase her confidence even more. She sees that AERO has already identified the [key features of formative assessment](#) as:

- begin with a deep understanding of what your students need to learn
- set clear and measurable learning objectives and success criteria
- regularly check for student understanding
- provide timely feedback that is individualised where possible.

Compare contexts

Alice then considers whether any aspects of her system, school, classroom or student context may have an influence on the key features of formative assessment. Alice considers that she works in a school with many students from low socio-economic backgrounds, and that the system has provided her with a curriculum that clearly breaks down the learning progressions across the subjects she teaches.

Assess whether context matters

Alice concludes that none of these contextual factors would negatively influence the key features of formative assessment. Given what she's read about formative assessment from AERO's [list of further reading on formative assessment](#), she decides it's unlikely that any system, school or classroom context will render regularly checking for student understanding and providing timely feedback less effective. Alice concludes with confidence that the evidence base on formative assessment is relevant to her context and that the approach will be effective in her classroom.



Example 2: Peer coaching program for staff

Hoa is the principal of a primary school in northern Adelaide. He is trying to figure out whether evidence he has just heard about through his principals' network will be relevant to his school. The evidence suggests that a peer coaching program that pairs experienced teachers with newly graduated teachers is an effective form of professional learning.

Assess the evidence

At the last network meeting, Hoa listened to a presentation from Leo, a principal of the local secondary school. Leo showed data from classroom observations showing an association between graduate teachers participating in peer coaching and improvements in their classroom practice.

Hoa also remembers Leo saying that he decided to implement the approach based on [research evidence](#) generated in the United States, which showed that peer coaching caused positive effects on student outcomes. Hoa reads a summary of the study and notes that it was conducted in 14 elementary (primary) and middle (lower secondary) schools in a medium-sized school district in Tennessee.

Hoa concludes that he needs to investigate further whether this evidence is relevant to his context, as the evidence he has only shows that the approach is effective in 2 different contexts, both of which are a little different to his own.

Identify key features of the approach

Hoa starts by identifying key features of the program. He remembers that during his presentation, Leo noted the 4 key features of the approach:

- observing a newly graduated teacher's classroom practice to identify key areas of development
- identifying an experienced teacher with strengths in the same area
- meeting with the newly graduated teacher and experienced teacher at the beginning of a term and asking them to work together to develop their practice in this focus area
- giving the teachers 2 hours of dedicated professional learning time a fortnight for the whole term to observe each other's classrooms and discuss the focus area.

Leo emphasised that they gave no explicit guidance on how to do peer coaching, nor did they require reporting of how teachers used the time. This was done deliberately to allow teachers to adjust the approach as needed.

Compare contexts

Hoa's school is a primary school in the northern suburbs of Adelaide supporting students primarily from culturally and linguistically diverse (CALD) backgrounds. While there are a couple of teachers at Hoa's school that have taught there for nearly 20 years, most have fewer than 5 years of teaching experience.

Hoa considers how this context is different from Leo's and the US study. He notes that some schools in the US study were elementary schools in low-socioeconomic areas, which is similar to his school context. He also notes that Leo's school staff have a more distributed range of years of experience, with fewer newly graduated teachers.

Further, unlike Leo's school and the US study, Hoa's school primarily serves children from culturally and linguistically diverse backgrounds.

Assess whether context matters

Based on this comparison of contexts, Hoa considers whether any of the key features of peer coaching may be affected by the distinguishing aspects of his context – that is, a primary school with a relatively inexperienced school staff serving mostly children from culturally and linguistically diverse backgrounds.

Hoa first considers the students at this school. He concludes that classroom observations, peer feedback, and teacher collaboration should be just as effective in primary schools as secondary schools. He also concludes that student characteristics such as coming from a CALD background would not influence the key features of peer coaching for teachers.

Hoa then considers staff experience at his school. Having fewer experienced teachers overall in his school will make it harder to identify peer coaches for his newly graduated teachers. This is a problem, as a key element of peer coaching is that newly graduated and experienced teachers are matched based on their respective areas of development and strengths.

Hoa concludes the evidence he has on peer coaching is only relevant for his context if he is able to create good matches between experienced and newly graduated teachers in his school. Hoa looks at his teachers' annual performance reviews and professional portfolios to decide whether he would be able to create good matches and, if so, implement peer coaching in his school.

Example 3

Alex is a service manager at a long day care centre for children across the birth to 5 years age range in inner city Melbourne. Some of Alex's colleagues at another early childhood education and care service have started using a new app designed to develop numeracy skills in children as young as 2 years. The company that owns the tool has reached out to Alex and offered a free year-long trial for a handful of teachers and educators at their service.

Alex agrees with research and expert advice that digital technology is best included as an open-ended tool or resource to support young children's investigations and discovery in play-based learning. Although she is wary of apps targeting skills development in young children, she's been hearing a lot about this new app and decides she should find out more.

Assess the evidence

Alex talks to colleagues and learns that the app is primarily useful for supporting children who have not yet learned to count or identify numbers and shapes. The app does not have more advanced games to support children who have already developed this sort of early numeracy knowledge.

Alex looks at the company website. The online testimonials are primarily from long day care centres in the United States with a high proportion of children from families experiencing socio-economic disadvantage who are learning English as an additional language or dialect.

These online testimonials emphasise that the app is effective in accelerating children's early numeracy knowledge relatively quickly.

Beyond what is available on the company's website and the anecdotal feedback from colleagues, Alex can find no further evidence on the tool and its impact on child outcomes. Alex decides to investigate further to determine whether evidence on this app is relevant to her context.

Identify key features of the approach

Alex looks into the app and notes a few key features:

- An educator or teacher logs onto the app using a mobile device such as a tablet or smartphone. They register each child individually so the home screen of the app has a list of all children attending the service.
- When a child expresses interest in using the device, an educator or teacher selects the child on the list and a new game appears on the screen ready for the child to interact with.
- The child plays the game on their own for approximately 2 to 3 minutes.
- When the game is finished, the screen goes blank. After a delay, a button flashes. If the child presses the flashing button, a new game will load focused on the same skill or a new skill, depending on the child's engagement and performance in the previous game. If the child doesn't press the flashing button, the app goes idle and the educator or teacher can log into the app for the next child.

Compare contexts

Alex notes important differences between how the app and her long day care centre support numeracy development. The app's features encourage children to engage with digital technology on their own for the specific purpose of developing numeracy skills. In contrast, educators and teachers at Alex's service embed counting in play-based learning and everyday experiences such as mealtimes. Alex notices that educators and teachers talk with children about shapes they see in their environment as a way to build understanding. The children are showing that they're able to identify numbers and shapes in their everyday experiences. From these observations Alex concludes that rich mathematics learning is already taking place.

Alex thinks about the demographics of the children at her long day care centre. Children at the centre predominantly come from families with high socio-economic status backgrounds. Over 80% of the children and their parents were born in Australia and speak English as their first language. Alex acknowledges that there are many ways that the children at her long day care centre could be different to the children attending her colleagues' service and those described on the company website. Importantly, children at Alex's centre are already showing the sort of early numeracy knowledge that the app seems to be useful in developing.

Assess whether context matters

Alex is concerned that the app is not useful for supporting children's capacity and confidence to use mathematics in daily life. She also thinks the app will not be very engaging as the games mostly focus on knowledge the children have already developed.

Alex concludes that she is not confident that the application will be effective for the children at her service. Alex decides not to trial the application and to continue focusing on supporting children to develop numeracy development through play-based learning experiences with educators, teachers and peers.

Next steps

Once you've determined the evidence is relevant to your context, you'll want to carefully consider whether you should use that practice or program, and if so, how to go about making the change. AERO's [Applying Research Evidence](#) practice guide will help you think through these considerations.

Furthermore, AERO's [Interactive Evidence Decision-Making Tool](#) helps you decide how confident you are that a particular practice or program is evidence-based and worth using. The tool also offers suggestions for how to proceed – either by collecting more evidence or using the approach – based on your level of confidence.