ascia

australasian society of clinical immunology and allergy

anaphylaxis e-training for children's education and care services

2024 REPORT

Contents

Introduction

From December 2023 to December 2024, ASCIA included a mandatory post-training short survey in ASCIA anaphylaxis e-training for children's education and care (CEC) services in Australia and New Zealand.

In 2024, there were 14,318 course and survey completions, which is a 57% increase compared to 9,133 course and survey completions in 2023.

Course completions included a significant proportion of participants in regional, rural or remote areas, as well as metropolitan areas:

- 72% worked in a metropolitan area (in or near a major city)
- 28% worked in a regional, rural or remote (RRR) area.

The large increase in course completions is due to promotion of the course by ASCIA through conferences, e-newsletters and social media, as part of the National Allergy Council Schools and Childcare project.

The increased course completions indicate the importance of providing access to this form of training, reflecting the rising prevalence of allergic disease in Australia and New Zealand.

ASCIA anaphylaxis e-training courses for schools and CEC were first developed in 2010. The courses provide accessible, consistent and evidence-based training on recognition, emergency treatment and prevention of anaphylaxis. To facilitate access, ASCIA e-training courses are available at no charge to the user.

ASCIA anaphylaxis e-training is important for the following reasons:
- Anaphylaxis is the most severe type of allergic reaction and should always be treated as a medical emergency.
- Anaphylaxis requires immediate treatment with adrenaline (epinephrine).
- If treatment with adrenaline is delayed, this can result in fatal anaphylaxis.

Method and Analysis

Quantitative and qualitative analyses of the responses were undertaken by an independent data analyst who was not involved in developing the survey.

Respondents were presented with the following seven multiple choice survey questions, and one open-ended question:

1. In what region do you work?
2. Where do you work?
3. What device did you use to complete the course?
4. Select the following statements about the course that you agree with (content and instructions)
5. Select the following statements about the course that you agree with (videos and animations)
6. To what degree were your learning needs met?
7. How satisfied were you with the educational quality of this course?
8. How could this course be improved? (open answer)

Questions 4-8 were modified from the 2023 survey, to improve quality of the data obtained.
Data from the evaluation surveys in 2022 and 2023 has resulted in several updates made in 2024-2025, to improve the user interface and experience.

Summary of Findings

Overall, the information provided in **ASCIA anaphylaxis e-training for children's education and care services** was well received by those who completed the course.

In 2024 there were 14,318 course and survey completions, which is a 57% increase compared to 9,133 course and survey completions in 2023:

- A total of 9,511 (72%) of respondents indicated that they were in a metropolitan area (in or near a major city), and 3,753 (28%) were in a regional, rural or remote (RRR) area.

- Most course participants (75%) identified their role at work as an educator, while other roles included management, administration, and chefs.

- About half of respondents identified as working in long day care (47%), followed by 24% of respondents who identified as training to work in CEC services.

- ASCIA e-training courses are cross-device compatible. Most course participants (73%) used a desktop or laptop computer, followed by a smart phone (17%) or a tablet device (10%).

- Most respondents (83%) agreed that the course was relevant to their work and the content was easy to understand for 78% of respondents.

- Feedback about multimedia features of the e-training showed majority of respondents (77%) agreed that the images and infographics improved their understanding of the content. 60% of course participants indicated they clicked on the links to videos and animations.

- Almost all course participants indicated that their learning needs were either entirely met (91%) or partially met (8%), as shown in the following table (Question 6).

  Question 6. To what degree were your learning needs met?

Learning Outcomes	Entirely met	Partially met	Not met
Know the signs of mild to moderate, and severe allergic reactions (anaphylaxis).	91%	8%	1%
Know how to treat anaphylaxis by following an ASCIA First Aid or Action Plan.	91%	8%	1%
Know how and when to give an adrenaline injector.	91%	8%	1%

- Almost all respondents were either very satisfied (79%, n=11,344) or satisfied (21%, n=2,933) with the educational quality of the e-training course.

- Data collected from an open-answer question asking participants how the course could be improved resulted in mostly positive comments, blank or neutral comments with no improvements suggested from these groups of feedback. Visual and interactive elements were identified as the most significant opportunity of improvement, representing 16% of feedback. Smaller percentages of users called for improvements to assessments and quizzes, course content, and improving course navigation and user experience.

Question 1 - In what region do you work?

A total of 9,511 (72%) of respondents indicated that they worked in a metropolitan area (in or near a major city), and 3,753 (28%) worked in a regional, rural or remote (RRR) area.

Most respondents were from New South Wales (35%), Victoria (19%), Queensland (16%), and Western Australia (10%).

909 respondents (6%) identified as 'training to work" in a CEC service. Most of the 'Other' responses were made up of university students.

Location of respondents

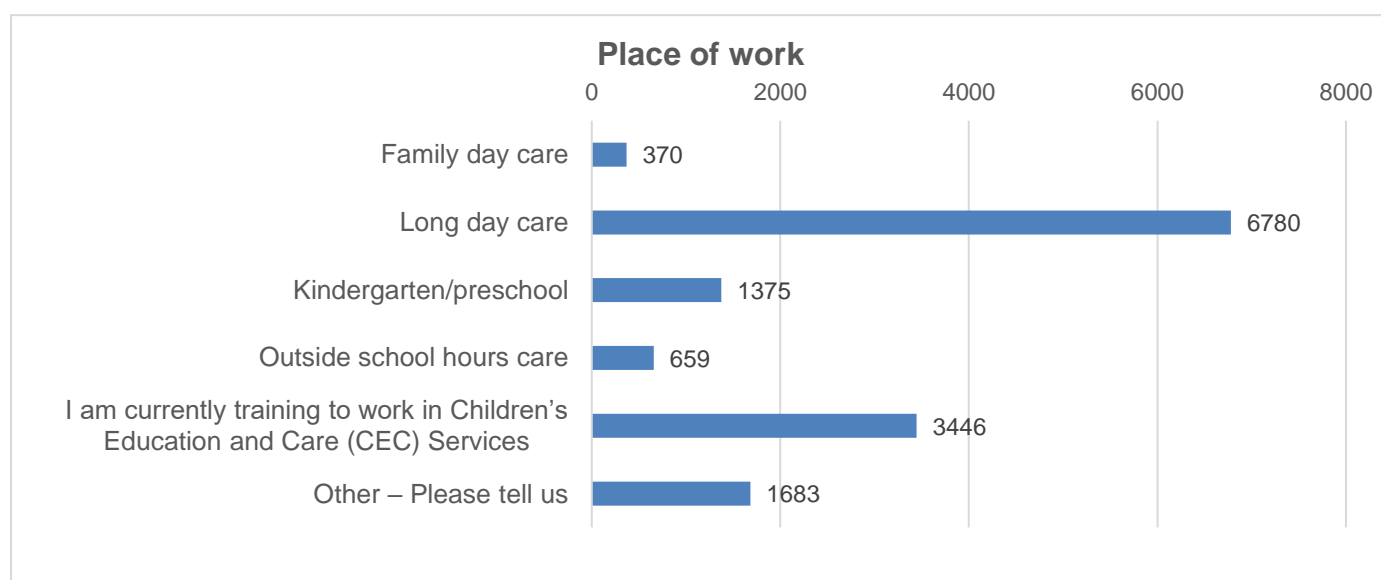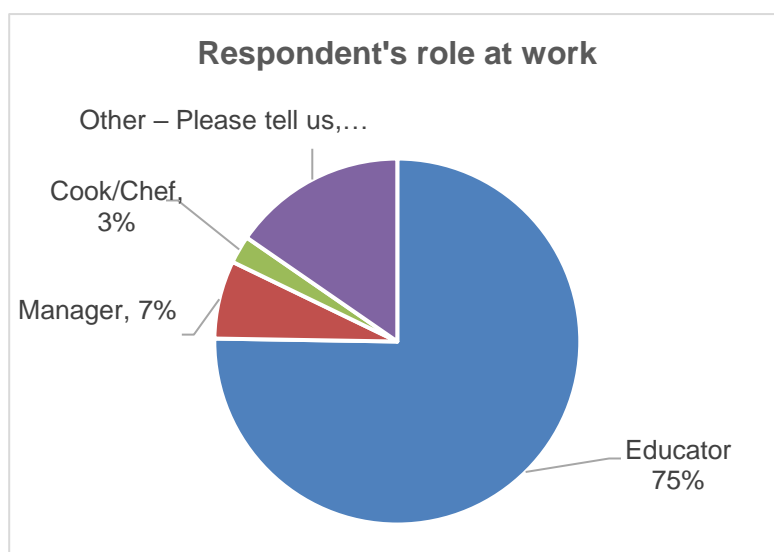| Region	Count
Australian Capital Territory	560
New South Wales - Metropolitan area (in or near a major city)	3574
New South Wales - Regional, rural or remote area	1504
New Zealand - Metropolitan area (in or near a major city)	48
New Zealand - Regional, rural or remote area	19
Northern Territory - Metropolitan area (in or near a major city)	20
Northern Territory - Regional, rural or remote area	19
Queensland - Metropolitan area (in or near a major city)	1445
Queensland - Regional, rural or remote area	817
South Australia - Metropolitan area (in or near a major city)	811
South Australia - Regional, rural or remote area	208
Tasmania - Metropolitan area (in or near a major city)	81
Tasmania - Regional, rural or remote area	61
Victoria - Metropolitan area (in or near a major city)	1995
Victoria - Regional, rural or remote area	760
Western Australia - Metropolitan area (in or near a major city)	978
Western Australia - Regional, rural or remote area	365
I am currently training to work in Children's Education and Care…	909
Other - Please tell us	144

Question 2 - Where do you work?

Most course participants identified their role as an educator (75%, (n=10,775).

15% of respondents (n=2202) identified with the 'other' role category. These responses were mainly made up of blank responses (n=1,424), different types of educator or management positions (n=473), allied health and support roles (n=146), administration roles (n=116).

Niche positions included nannies, snow sports instructors, and Aboriginal support.

Most respondents identified their place of work as long day care (47%, n=6,780). 24% of respondents (n=3,446) identified as training to work in CEC services.

Respondent's role at work

Other – Please tell us,…

Cook/Chef, 3%

Manager, 7%

Educator 75%

Place of work

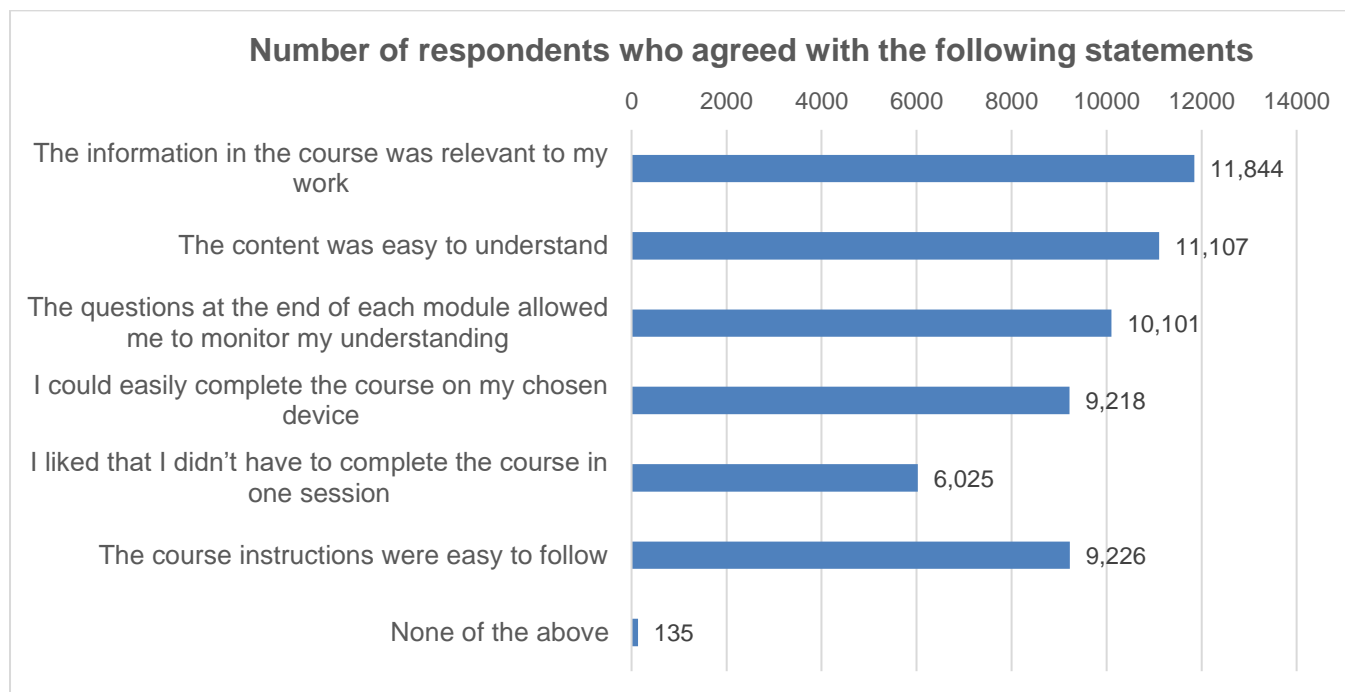| Family day care | 370 |
Long day care	6780
Kindergarten/preschool	1375
Outside school hours care	659
I am currently training to work in Children's Education and Care (CEC) Services	3446
Other – Please tell us	1683

Question 3 - What device did you use to complete the course?

Most respondents completed the course on a desktop or laptop computer (73%), with some also completing on their smart phone (17%), or a tablet device such as an iPad (10%).

Device used to complete course

Smart phone, 17%

Tablet or iPad, 10%
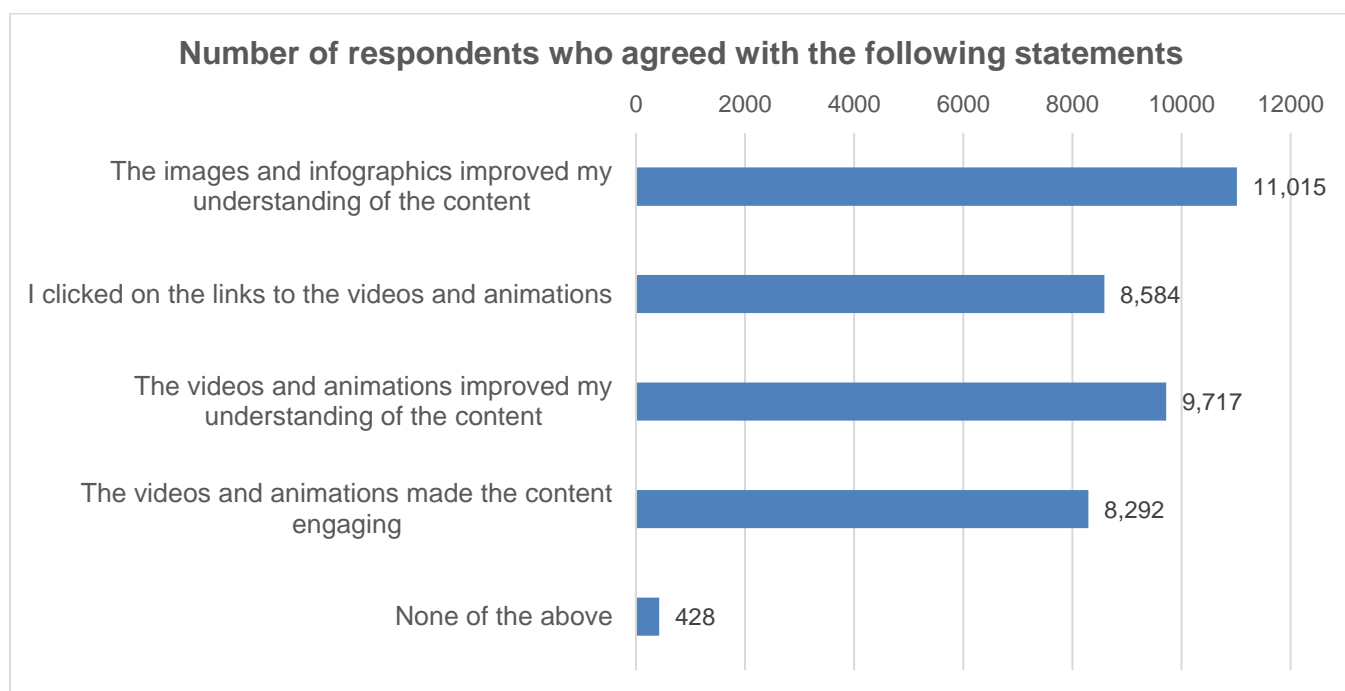
Desktop or Laptop computer, 73%
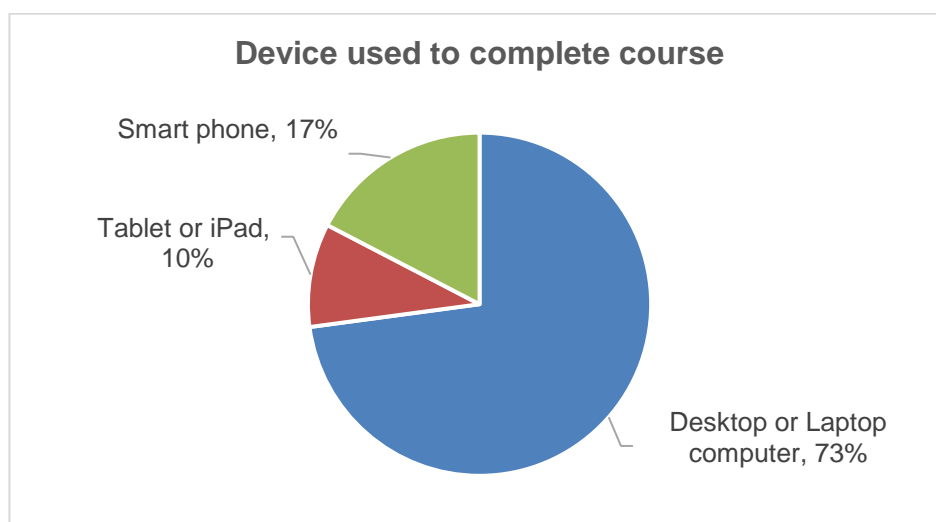
Question 4 – Content and instructions

Respondents were asked to give feedback about course content and instructions in the format of indicating which statement they agreed with. Most respondents agreed that the information was relevant to their work (83%, n=11,844) and the content was easy to understand (78%, n=11,107). Less than 1% of respondents did not agree with any of the positive statements about the course.

Number of respondents who agreed with the following statements

Statement	Number
The information in the course was relevant to my work	11,844
The content was easy to understand	11,107
The questions at the end of each module allowed me to monitor my understanding	10,101
I could easily complete the course on my chosen device	9,218
I liked that I didn't have to complete the course in one session	6,025
The course instructions were easy to follow	9,226
None of the above	135

Question 5 – Videos and infographics

Feedback about multimedia features of the e-training showed majority of respondents (77%, n=11,015) agreed that the images and infographics improved their understanding of the content. 60% of course participants indicated they clicked on the links to videos and animations. Less than 3% of respondents did not agree with any of the positive statements about multimedia features of the training.

Number of respondents who agreed with the following statements

| Statement	Number
The images and infographics improved my understanding of the content	11,015
I clicked on the links to the videos and animations	8,584
The videos and animations improved my understanding of the content	9,717
The videos and animations made the content engaging	8,292
None of the above	428

Question 6 – To what degree were your learning needs met?

The learning outcomes for the ASCIA anaphylaxis e-training for CEC is for participants to:

1. Know the signs of mild to moderate, and severe allergic reactions (anaphylaxis)
2. Know how to treat anaphylaxis by following an ASCIA First Aid or Action Plan
3. Know how and when to give an adrenaline injector.

Course participants were asked to what degree these learning needs were met, and 99% of all respondents indicated that all three of the above learning needs were met, either entirely (91%) or partially (8%).
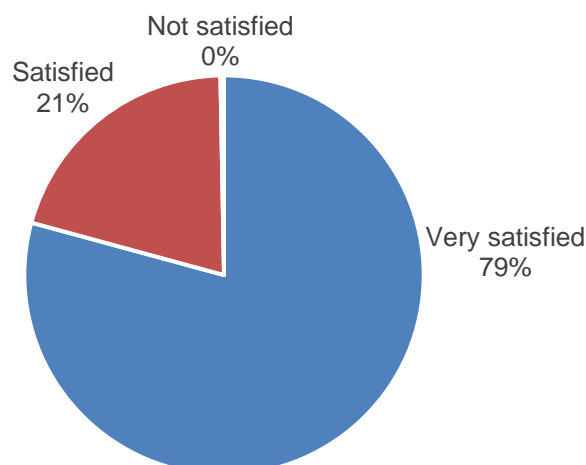
**Degree to which learning needs were met
(across all three learning outcomes)**

Not met
1%

Partially met
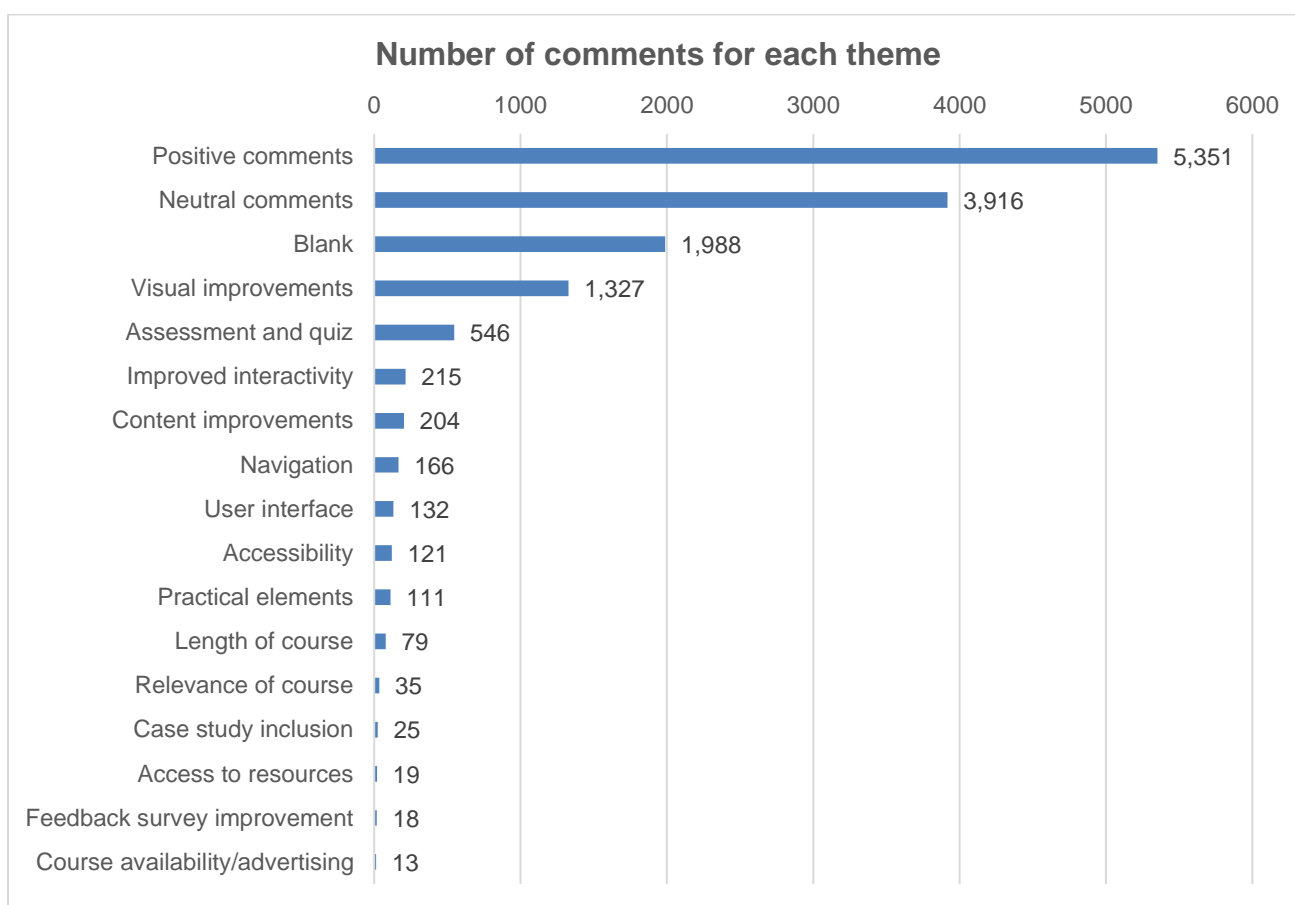8%

Entirely met
91%
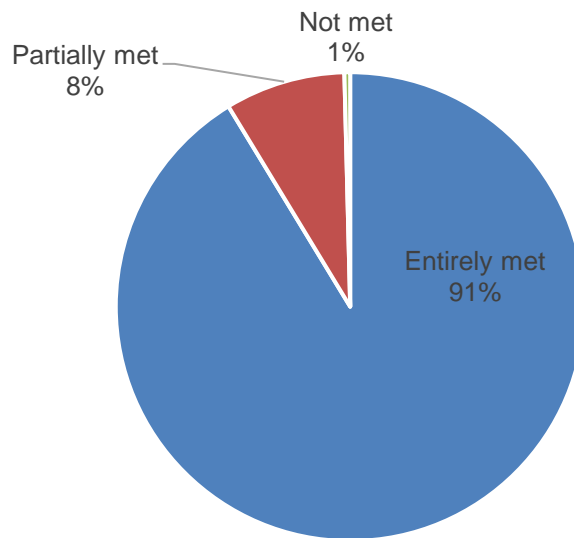
Question 7 – How satisfied were you with the educational quality of this course?

Almost all respondents were either very satisfied (79%, n=11,344) or satisfied (21%, n=2,933) with the educational quality of the e-training course.

Satifaction levels with educational quality of course

Not satisfied
0%

Satisfied
21%

Very satisfied
79%

Question 8 – How could this course be improved?

Number of comments for each theme

Theme	Count
Positive comments	5,351
Neutral comments	3,916
Blank	1,988
Visual improvements	1,327
Assessment and quiz	546
Improved interactivity	215
Content improvements	204
Navigation	166
User interface	132
Accessibility	121
Practical elements	111
Length of course	79
Relevance of course	35
Case study inclusion	25
Access to resources	19
Feedback survey improvement	18
Course availability/advertising	13

Most respondents provided either:

- Positive comments (n=5351, 37%)
- Blank (n=1988, 14%)
- Neutral comments (n=3916, 27%)

Blank and neutral comments such as "no comment" have been omitted from analysis.

Visual and interactive elements were identified as the most significant opportunity of improvement, representing 16% of feedback. Smaller percentages of users called for improvements to assessments and quizzes, course content, and improving course navigation and user experience.

Example quotes below are free text responses to Question 8 and may have minor grammatical corrections made to increase readability of this report.

Positive comments (n=5351, 64%)

Overall, users were satisfied with the course and found it well-structured, informative, and easy to follow. Many expressed appreciation for the content, stating that it met their expectations and didn't require any changes.

"I'm satisfied with this course."

"Nothing to improve, I agree with everything already provided."

"Nothing to say, very good course."

"Very impressed on the delivery of this course."

Visual Improvements (n=1327, 16%)

Suggestions included adding high-quality images, diagrams and videos to aid understanding. Around a quarter (n=329) of these comments specified that existing images were blurry or too small, making them difficult to see. Other comments recommended incorporating infographics to aid retention of information, and several mentioned that animations or step-by-step video demonstrations would make complex topics easier to understand.

"Videos should have transcripts."

"Maybe allow the scaled-down image be clickable to enlarge."

"More videos to show reactions of anaphylaxis and administer EpiPen."

"Maybe real life scenarios in videos... but not a major need, just something different."

"Including more videos and animations related to each topic."

"Less reading and more video maybe."

Assessments and quiz (n=546, 7%)

Comments were evenly split about question difficulty, with half noting the questions were too easy and suggested adding more challenging ones, and the others giving feedback that certain questions were too complex or ambiguous. Several users wanted immediate feedback on quiz answers to understand mistakes.

"This course can be more detailed in questions."

"Overall, the whole course was very informative but I feel the questions must be asked in an more tricky way to understand the awareness of the course taker. I am satisfied by the level of easy content to understand."

"Less quiz questions."

"Implement more questions to test more knowledge."

"By not needing 100% to pass."

"If a question is half wrong and half right, then it should still pass."

"It would be great to add a few more questions about the symptoms of different allergies."

Improved interactivity (n=215. 3%)

Respondents suggested that adding quizzes, drag-and-drop exercises, clickable infographics or simulation-based learning could enhance participation. Many of these comments mentioned that the course felt too static and suggested the inclusion of interactive animations, hover-over explanations and colour-coded content for better comprehension. A minority reported that the course was already engaging.

"More interactive tutorials."

"Perhaps a more updated, engaging interface."

"The course could be enhanced to provide learners with a more effective and engaging learning experience in anaphylaxis management."

"Could be more interactive."

"More engaging questions, rather than true or false, it would be nice to have pictures to click on and choose (I'm a visual learner)."

Content improvements (n=204, 2%)

Most comments about content improvements suggested including more in-depth information on specific topics such as maintaining the emotional wellbeing of children experiencing anaphylaxis and food allergies. Others suggested that the content was too detailed and needed to be more concise or less repetitive with simplified language.

"Strategies to calm a child experiencing anaphylactic shock."

"Provide more detailed information."

"Could be improved with more information regarding food allergies."

"Providing more information."

"By summarising the main points in the end."

"At some points it can get repetitive."

Navigation (n=166, 2%)

Respondents reported difficulties with navigating the course, such as unclear menu options, unresponsive buttons, and the inability to save progress. Some found it frustrating that they had to start over if they left the course midway. 21 users suggested adding a progress tracker, a table of contents or the ability to bookmark sections for easy reference.

"Making it easy for participants to know how to save the partially completed course. I was halfway through and had to go back to the floor. When I logged back on, I had to start all over again."

Not having to start from scratch for one wrong bump of a button or wrong answer."

"I couldn't save my progress so I had to do the whole course in 1 session."

"I found one question would not save my response properly."

"I began the module, stopped, went back to continue but unable to find how to, therefore I needed to start over again. Not a big deal, but seems like it didn't save."

"Less clicking all on one page."

"I'm not really sure as it was easy to understand, I just needed to read the questions better before clicking the answers."

"I think the system for the course is ok, I had difficulty accessing the course as I was already enrolled but couldn't find where to click."

"Response of the questions at the final quiz be told right away would save time."

"3-4 times I would click a response to a question and it would come up incorrect but show the right answer was the one I clicked. After the second time this occurred I noticed I had clicked on false (correct answer) but identified my response as true (incorrect). This was frustrating. It may be that the response order are randomised."

User interface (n=132, 2%)

51 users commented that they found the website layout confusing or outdated, making it difficult to locate essential features. 34 comments mentioned login issues, such as password reset difficulties or slow loading times. Several users suggested a cleaner and more modern design with better spacing, consistent font styles and a more intuitive user interface.

"Different layout/bigger font size."

"There are no concerns about the course content, but I did have great difficulty accessing my account to start the course. After numerous attempts I decided to send a message via your help form, I was told my email had been blocked for some unknown reason. And was suggested I use another email address and create another account. I needed to find an alternative email address in order to undertake the course. Having to spend so much of my time trying to log in, was a little bit disappointing."

"The layout seemed a little outdated, but still did the job!"

"Easier layout."

"The course layout was confusing to navigate around to get started."

"Log in took a while."

"The platform of website should rearrange so people easily see the progress of their learning."

Accessibility (n=121, 2%)

Some respondents highlighted accessibility concerns, such as small font sizes that made reading difficult and the lack of audio options to assist those with varied abilities and learning styles.

"Make it more smart-phone friendly."

"Bigger sized text."

"By reducing the text and adding more visuals."

"Multicultural aspects can be achieved by having versions in different languages."

"Larger print on smart phone screen."

"Better text formatting."

"Maybe provide audio transcripts of the information in the module for people with dyslexia or learning disabilities."

"Larger font size for the text."

Addition of practical elements (n=111, 1%)

Respondents suggested that the addition hands-on learning experiences, such as role-playing exercises or face-to-face training sessions would assist them in feeling more prepared to manage anaphylaxis. Practical elements suggested included the provision of demonstration injectors and an opportunity to practice.

"Add some more information about distressed children and how to go about giving injections etc."

"Practical skills-based session should be organised for educators to practice the administration of Epipen."

"Having this course down face to face with staff."

"Guarantee of practical training in child-care centres."

"Include practical component as well."

Length of course (n=79, 1%)

Respondents provided mixed feedback on course length. Most (n=53) suggested making it more concise, while others preferred a self-paced option to complete the course at their convenience.

"Make it shorter."

"It could have the length shortened to main points."

"It takes longer than it says."

Regular content updates and course reminder (n=35, <1%)

Some respondents highlighted the importance of regularly reviewing and updating content and sending reminders for refresher courses to be completed.

"By sending reminders each year to all the educators."

Other (n=25. <1%)

- There was mixed feedback about the relevance of the course (n=35), with some comments appreciating the relevance, and others suggesting more childcare relevance.
- Some respondents asked for the inclusion of case studies (n=25) to make the content more applicable to CEC services.
- Others found the feedback survey to be too long and did not like that it was mandatory and difficult to access (n=18).
- Respondents requested greater access to resources (n=19) such as downloadable PDFs, summary sheets, links to further resources or printable reference guides for offline use.
- Some comments called for the course to be made more widely available (n=13) to members of the general public, parents, community services and generally people of all different fields so that the entire community is well trained in anaphylaxis management.

ASCIA Actions in Response to Feedback

While the overall feedback was positive, the information provided in this report will guide future improvements to ASCIA online training including **ASCIA anaphylaxis e-training for children's education and care (CEC) services.** Improvements in 2025-2026 will be made as part of the National Allergy Council Schools and Childcare project.

To encourage increased usage of these courses, ASCIA will:

- Continue to promote courses through conferences, e-newsletters and social media.
- Continue to communicate course updates to stakeholders, through e-newsletters and social media.
- Consider implementing an annual reminder service for participants.

In response to 2024 feedback surveys, ASCIA will develop accessible, consistent and evidence-based online resources to support ASCIA e-training courses, which will be available open access on the ASCIA website.

These resources will:

- Provide scenario-based learning for CEC services
- Include photographic images to complement infographics
- Support pre- and post-qualification training of CEC services staff
- Support in-person practical training on how to use adrenaline devices
- Reinforce key competencies and ASCIA e-training course learning outcomes
- Be regularly reviewed by ASCIA, evaluated by participants and updated as required

Feedback from ASCIA course evaluation surveys conducted in 2022 and 2023 prompted ASCIA to:

- Improve the user interface by developing new websites with easier navigation and login to optimise access and function:
  - ASCIA e-training for health professionals https://traininghp.ascia.org.au/
  - ASCIA e-training for schools, childcare and community https://training.ascia.org.au/
- Develop an animated webcast version of the short refresher anaphylaxis course for schools, CEC and community, which includes new professional videos of adrenaline devices being administered www.allergy.org.au/ascia-videos
- Include new images, videos and infographics that support and reinforce updated content, to optimise user experience.
- Limit the number of questions in the mandatory final survey to avoid survey fatigue, but still enable evaluation, which is required for CPD approved courses.