

The idea they can speak to a real psychologist kinda blows their mind. They read about studies in books but don't see those researchers as actual people.

— Teacher, Society Zone, June 2018

# I'm a Scientist, Get me out of here BPS Psychology Zones 2018–19 Summary Report





# **Summary**

Main findings from evaluating the BPS funded zones run between June 2018 and March 2019:

- Six psychology zones were run across three events:
  - o June 2018: Society Zone; Wellbeing Zone
  - o November 2018: Childhood Zone; Memory Zone
  - o March 2019: Perception Zone; Relationships Zone
- BPS members and other psychologists are keen to take part. 37
  psychologists took part, answering students' questions and taking part in
  live chats:
  - o 68 BPS members applied to take part.
  - 35 psychologists were given places in BPS funded zones; 24 were BPS members.
  - o 2 BPS members took part in additional (non-BPS funded) zones.
- 69% of students talking to the psychologists were from widening participation or underserved schools.
  - Demand from teachers was double the space available.
- The topic of psychology, the specific zone themes, and the psychologists'
  different fields of research and their work were all popular topics of
  discussion in the zones. Students were also interested in the topic of being a
  psychologist with discussions around ethics and research participants; as well as
  the topic of mental health conditions, with questions about ways people can
  improve their mental health, as well as more specific questions to those
  psychologists whose work related directly to mental health.
- I have learnt that taking psychology as a GCSE in a couple of years will help me develop my knowledge and will give me a greater ability to become a doctor. — Student, Memory Zone, November 2018
  - Students and teachers report that taking part in IAS helps to improve students' attitudes and motivations towards STEM, and careers and further education in STEM.
- There were questions that really challenged me as a scientist and reminded me why I love this job ... As scientists sometimes we forget about the myriad of questions that haven't been answered, and it was great to have students remind us about them. — Vassilis, psychologist
  - Psychologists report that taking part in IAS improved communication skills and gave psychologists a broader understanding of how young people view psychology and science
- £3,000 in prize money was distributed among six zone winners (four of whom are BPS members) to be spent on further public engagement with psychology.



# **Background**

I'm a Scientist, Get me out of here (IAS, imascientist.org.uk) is an online public engagement project where school students meet and interact with real scientists. Events take place over two weeks in March, June, and November each year; with events split into themed and general science zones.

Each zone is a competition between the STEM professionals, where students are the judges. The events give students, particularly those at schools far from research centres, the opportunity to meet people working in STEM. Taking part builds students' Science Capital and shows that the wide range of STEM careers can be for them.

The event has three parts: ASK, CHAT and VOTE. Students ASK questions and have text-based live CHATs with the scientists. Students learn more about the work of STEM professionals, and let them know their opinions. The after-school family chat engages their family members at home. Students then VOTE for their favourite person in their zone to win £500 prize to be spent on more public engagement.

In 2018 the British Psychological Society (BPS) agreed to fund multiple IAS psychology zones each year, where students across the UK connect with psychologists and BPS members.

# **Zones**

Six psychology zones were run across three events between June 2018 and March 2019:



**societyj18.imascientist.org.uk**June 2018



childhoodn18.imascientist.org.uk November 2018



perceptionm19.imascientist.org.uk
March 2019



wellbeingj18.imascientist.org.uk June 2018



memoryn18.imascientist.org.uk November 2018



relationshipsm19.imascientist.org.uk March 2019



# **Audience and participants**

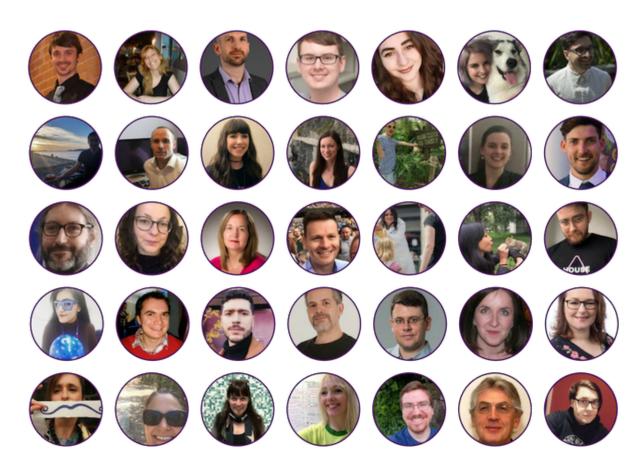
# **Psychologists**

At time of writing 76 BPS members have applied to take part in IAS.

Across the 6 psychology zones, 36 psychologists were selected to take part; with 35 actively participating; 24 were BPS members. Additionally, two BPS members took part in other — non-BPS funded — IAS zones in this time period.

Participants represented a wide variety of fields, sectors, and applications of psychology. Most were involved in academic research, including PhD students, postdoctoral researchers, lecturers, and professors; four worked in the public sector, including the NHS, Ofsted, and HM Prison and Probation Service; two were technicians, and two came from the private sector.

Participants took part from workplaces across the UK — from Bournemouth to Edinburgh — also from universities in Cyprus, Switzerland, and Japan.



Above: Gallery of participating psychologists in 2018–19 BPS funded zones.

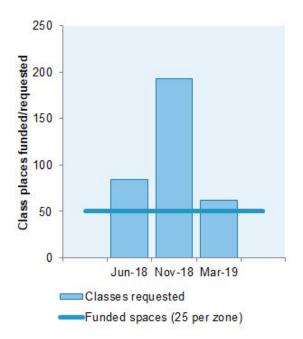


## Schools and students

A total of 339 classes were requested in the 2018–19 BPS psychology zones, from teachers at 79 schools. With 25 class places available in each of the 6 zones, 150 classes were allocated among 51 schools.

All three events were oversubscribed with more classes requested than were available. The November 2018 event was the most popular with teachers, being nearly four-times oversubscribed. In general, the November 2018 IAS event saw the highest demand across all zones. Psychology teachers report that November is a good time for taking part in IAS, as this is before students sit their A-level exams.

Going forward, November would be a good time of year to run additional psychology zones.



Above: Chart showing class places funded and requested for BPS Psychology Zones in 2018–19



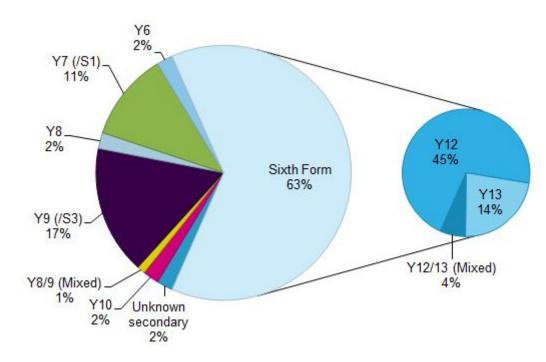
Above: Map of actively participating schools in 2018–19 BPS funded zones.



# 1,638 students from 36 schools actively engaged in the zones,

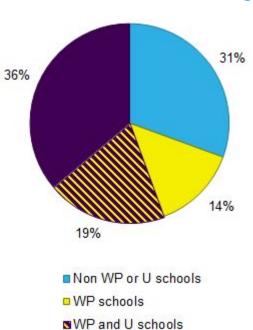
through asking questions, taking part in live chats, posting comments, or casting a vote.

The majority of classes taking part in live chats were sixth-form groups (63% of live chats), with most of these being year 12 classes.



Above: Chart showing breakdown of year groups participating in each live chat in 2018–19 BPS funded zones.

## **Underserved and widening participation schools**



■ U schools

69% of actively engaging schools (25/36) were widening participation or underserved schools.

The chart (left) shows the makeup of actively engaging schools.

Students from these schools contributed 11,506 lines of live chat (72% of total), and had 835 approved questions in ASK (72% of total).

Left: Chart showing makeup of engaged schools.



# **Activity**

Zone Reports are published for each of the Psychology Zones, containing information on what happened in each zone, popular topics of discussion between the students and psychologists, and key activity data.

Zone reports published at: about.imascientist.org.uk/category/zone-reports/bps/

# **Key figures**

|                                     | June 2018 |           | November 2018                |                     | March 2019            |                    |             |         |
|-------------------------------------|-----------|-----------|------------------------------|---------------------|-----------------------|--------------------|-------------|---------|
|                                     | Society   | Wellbeing | Child-<br>hood<br>(6th form) | Memory              | Perception (6th Form) | Relati-<br>onships | Total       | Average |
| Page views                          |           |           |                              |                     |                       |                    |             |         |
| Total Zone                          | 15,891    | 11,061    | 10,499                       | 25,322 <sup>1</sup> | 10,969                | 13,060             | 86,802      | 14,467  |
| ASK page                            | 565       | 438       | 609                          | 1,791               | 334                   | 841                | 4,578       | 763     |
| CHAT page                           | 1,038     | 640       | 1,065                        | 1,628               | 586                   | 1,234              | 6,191       | 1,032   |
| VOTE page                           | 778       | 642       | 473                          | 764                 | 521                   | 958                | 4,136       | 689     |
| Registered users                    | 292       | 235       | 356                          | 444                 | 202                   | 284                | 1,813       | 302     |
| % of students actively engaged      | 84%       | 94%       | 85%                          | 93%                 | 89%                   | 95%                | 90%         | 90%     |
| Questions asked                     | 187       | 149       | 212                          | 938                 | 113                   | 378                | 1,977       | 330     |
| Questions approved                  | 118       | 95        | 147                          | 532                 | 89                    | 176                | 1,157       | 193     |
| Answers given                       | 194       | 166       | 235                          | 768                 | 188                   | 460                | 2,011       | 335     |
| Comments                            | 9         | 9         | 45                           | 93                  | 22                    | 16                 | 194         | 32      |
| Votes                               | 217       | 186       | 272                          | 398                 | 162                   | 233                | 1,468       | 245     |
| Lines of live chat                  | 3,901     | 3,990     | 4,375                        | 7,961               | 2,398                 | 5,364              | 27,989      | 4,665   |
| Live chats                          | 19        | 15        | 24                           | 19                  | 18                    | 17                 | 112         | 19      |
| Average lines of live chat per chat | 205       | 266       | 182                          | 419                 | 133                   | 316                | 1,521       | 254     |
| Schools                             | 8         | 8         | 9                            | 8                   | 7                     | 6                  | <b>36</b> ² | 8       |
| Psychologists                       | 6         | 5         | 6                            | 6                   | 6                     | 6                  | 35³         | 6       |

<sup>&</sup>lt;sup>1</sup> Activity in the Memory Zone is higher than other zones with more students registered; this zone had the highest proportion of non-sixth-form classes, likely resulting in larger average class sizes.

<sup>&</sup>lt;sup>2</sup> Some schools took part in multiple events.

<sup>&</sup>lt;sup>3</sup> In addition to the 35 psychologists taking part in the 6 BPS funded zones, 2 additional BPS members took part in other IAS zones between June 2018 and March 2019.



# **Popular topics**

Across the six zones students were engaged in the topic of psychology, and the specific zone themes, and the psychologists' different fields of research and their work. There were discussions about being a psychologist, with students interested in the ethics behind different research, how psychologists can be sure they are following BPS guidelines, and how they find participants for their studies.

The topic of mental health conditions was also of interest to students, with questions about ways people can improve their mental health, as well as more specific questions to those psychologists whose work related directly to mental health.

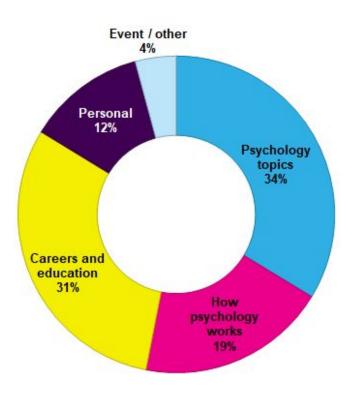
In the Society Zone (June 2018), students were particularly interested in conspiracy theories, stemming from Daniel's research. Students were interested to know whether he had ever found any legitimate proof for a given theory, and about the psychology behind why people may believe different conspiracies; these discussions inspired Daniel's winner project.<sup>4</sup>

## **Topics discussed in posted ASK questions**

The diagram shows questions asked in the six psychology zones, coded by theme.5

Questions on psychology topics were popular (34%), including questions such as: "Are memories stored in brain cells and if they are how many memories can one brain cell hold?", "Do you think social media is psychologically good or bad?", "Do you think that alcoholism and smoking addiction both impact different peoples physical and mental wellbeing?", and "Why do we dream?"

Students were also interested in careers and education (31% of questions asked), asking questions such as: "How was it moving away from your parents at uni?", "What kind of work experience did you do while in school? Was it anything to do with psychology?", and "Are there many jobs possible with a psychology degree?"



<sup>&</sup>lt;sup>4</sup> See also: *Impact and feedback; Winner projects and plans.* 

<sup>&</sup>lt;sup>5</sup> Read more about how questions are coded at: **about.imascientist.org.uk/student-question-coding** 

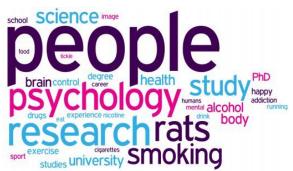


## **Topics discussed in live CHATs**

**Diagrams show keywords from live CHATs in the zones.** Relative size represents the frequency of the word:



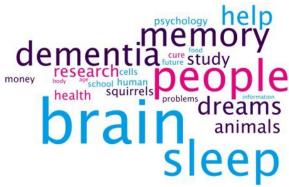
Society Zone, June 2018



Wellbeing Zone, June 2018



Childhood Zone, November 2018



Memory Zone, November 2018



Perception Zone, March 2019



Relationships Zone, March 2019

<sup>&</sup>lt;sup>6</sup> In March 2019 the words "people" and "psychologist", "scientist", etc were removed from word clouds as these are naturally present and don't help differentiate what was talked about in different zones.



# Impact and feedback

## Students and teachers

Teachers reported<sup>7</sup> IAS to be an effective tool for improving students' motivations towards science, helping students see how science relates to the world around them, and challenging students' stereotypes about scientists. 95% of teachers reported that IAS improved students' confidence in asking questions about science.

Feedback shows that taking part in IAS improves students attitudes and motivations around STEM, and that taking part improves their Science Capital, as students are more likely to identify with scientists, and see STEM as something for them:

The idea they can speak to a real psychologist kinda blows their mind. They read about studies in books but don't see those researchers as actual people. — **Teacher, Society Zone, June 2018** 

[I have learnt] that you don't have to know everything about science to be a scientist.

— Student, Memory Zone, November 2018

Furthermore, both students and teachers reported that taking part had a positive impact on students' awareness and attitudes to careers and further education in STEM.

92% of teachers taking part in IAS found the event to be an effective resource for developing students' awareness of careers in science. Student comments show the positive impact of taking part in psychology zones on attitudes to careers and further education:

I have learnt that taking psychology as a GCSE in a couple of years will help me develop my knowledge and will give me a greater ability to become a doctor. — **Student, Memory Zone, November 2018** 

[I have learnt] that psychology helps towards a job in the police force. — **Student,** Childhood Zone, November 2018

[I have learnt that science] can take you anywhere and constantly opens new opportunities. — **Student, Childhood Zone, November 2018** 

I've learned that there are so many different paths you can take using sciences (particularly psychology). — **Student, Childhood Zone, November 2018** 

<sup>&</sup>lt;sup>7</sup> See below for highlight results from teacher post-event surveys.



**Highlight results from post-event teacher surveys,** IAS (all zones, including non-BPS funded zones) June 2018 – March 2019: Respondents giving an answer of "5 (highly effective)" or "4", when asked, "On a scale of 1–5 how effective do you think I'm a Scientist is for the following?":

| "Improving students' confidence in asking questions about science" (n=86)  | 95% |  |  |  |
|--|-----|--|--|--|
| "Improving students' motivations towards science" (n=88)                   | 91% |  |  |  |
| "Helping students see how science relates to the world around them" (n=87) | 94% |  |  |  |
| "Challenging students' stereotypes about scientists" (n=87)                |     |  |  |  |
| "Developing students' awareness of science careers" (n=88)                 | 92% |  |  |  |

# **Psychologists**

Through taking part in IAS psychologists gained a broader understanding of how young people view psychology and science in general; and became aware of the issues that are of interest to students:

I genuinely feel very confident about the future of Psychology after chatting with all these students. Their curiosity to learn more about human behaviour, experimental research and the differences between our research areas was evident ... Without a doubt, it was very exciting seeing young people being that engaged in the chats and being eager to learn more about science, about us and our jobs. — Vassilis, psychologist, Perception Zone, March 2019 <sup>8</sup>

I also really enjoyed it when [the students] asked me to clarify facts or information [the students] had previously heard about psychology or science in general. Questions that began with 'Is it true that...' put a real smile on my face! More often than not these questions related to 'urban myths' which are common misconceptions about science. For example 'Do we only use 10% of our brains?' or 'If we wake up a sleepwalker will they die?' (the short answer is 'no' on both counts). It is truly fantastic that you are seeking out second opinions, engaging in basic fact checking and are generally demonstrating critical thinking like this. — Alex, psychologist, Memory Zone, November 2018 <sup>9</sup>

In blog posts written following the event, psychologists discussed how taking part in IAS had increased their interest in, confidence, and skills in public engagement:

I was blown away by the detailed questions about my work and the impact that it will have on the lives of young people and their families. These questions really made me

<sup>&</sup>lt;sup>8</sup> Winner's thank you post, Perception Zone, March 2019: perceptionm19.imascientist.org.uk/2019/03/21/thank-you-from-your-winner-vassilis

<sup>&</sup>lt;sup>9</sup> Winner's thank you post, Memory Zone, November 2018: memoryn18.imascientist.org.uk/2018/11/23/thank-you-from-your-winner-alex



think and that's a great thing! ... [I learnt] how to talk about my work in everyday terms. This was a huge help to me and something I will continue to work on. I really think that it is important for scientists to be able to talk about their work to everyone and something that we are not always good at ... If anyone is thinking about taking part in I'm a Scientist in the future then I would strongly encourage them to go for it. It was hard work, fun, humbling, thought provoking, and so much more. — **Abbie, psychologist, Childhood Zone, November 2018** 10

I didn't realise how much I could learn from chatting about my work. Some of the questions asked made me really think about what I was doing, and coming up with ways to make accessible for everyone to understand. But it also taught me to how to make it sound interesting to kids, who may normally find science boring or would never think to look at the topic I research. — Sam, psychologist, Wellbeing Zone, June 2018 11

**Taking part helped to remind psychologists why they got into psychology, and science in general.** They became more enthused and appreciative of the value of their work and research:

There were questions that really challenged me as a scientist and reminded me why I love this job. For example, complex questions such as "What is your opinion on Artificial Intelligence? Do you think it will be useful, or do you think it may hinder us in the future?" or, "Do you think that A.I. will be influential in behavioural psychology?" really set the tone for having an in-depth debate around Philosophy and Psychology. But we also got questions that were simpler and I never thought about them, such as Why people who suffer from migraines have brain waves which appear like someone with epilepsy? As scientists sometimes we forget about the myriad of questions that haven't been answered, and it was great to have students remind us about them. — Vassilis, psychologist, Perception Zone, March 2019

#### Additionally, psychologists were able to engage with, and learn from one-another:

I had the opportunity to see various questions being asked to the other scientists and I learned about other approaches in psychological research such about Neuroscience and Illusions from Jane, about Neuroimaging approaches from Tirso and about using music for people's health and wellbeing from Dawn. — Vassilis, psychologist, Perception Zone, March 2019

<sup>10</sup> Winner's thank you post, Childhood Zone, November 2018: childhoodn18.imascientist.org.uk/2018/11/23/thank-you-from-your-winner-abbie 11 Winner's thank you post, Wellbeing Zone, June 2018: wellbeingj18.imascientist.org.uk/2018/06/26/thank-you-from-your-winner



Finally, psychologists were overall positive in their feedback about the project, were inspired and engaged by the students' questions, and enjoyed taking part:

The questions I received were excellent: insightful, creative, bold, sometimes funny and occasionally very tricky! To be on the 'front lines' and see you engage with the scientific community in this way was something to behold. Some of them really made me sit up straight in my seat and put me through my paces. What would happen if we cured death? What is the meaning of life? What experiences or events have changed my life? What changes do I want to see in the world? In some instances I had to take a long walk before responding to mull things over. The fact that some of these amazing questions engaged me in this way is a testament to you, the students. You are a bright and thoughtful bunch. Thank you for inspiring me and making my last fortnight one to remember. — Alex, psychologist, Memory Zone, November 2018

I hope I helped students get a feel for how psychology can take many forms, and while I have been a technician, teacher and researcher – there are also many other paths. Some of my favourite questions were the really challenging ones to answer. I was asked if plants have very subtle emotions, if Winnie the Pooh characters represented psychological conditions and how well psychology was represented in thriller movies!

— James, psychologist, Relationships Zone, March 2019 12

If you are reading this as a fellow psychologist or school wondering if you should take part in future events, then it is a big recommendation from me. It was such a busy, but amazingly fun and rewarding two weeks. There is nothing like it! I miss it already.

— Dan, psychologist, Society Zone, June 2018 13

<sup>&</sup>lt;sup>12</sup> Winner's thank you post, Relationships Zone, March 2019: relationshipsm19.imascientist.org.uk/2019/03/21/thank-you-from-your-winner-james <sup>13</sup> Winner's thank you post, Society Zone, June 2018: societyj18.imascientist.org.uk/2018/06/26/thank-you-from-your-winner-dan



## Winner projects and plans

Each of the six zone winners were awarded £500 to spend on their own psychology engagement project.

Winners are asked to complete their project within 12 months, and write a short report, to be published at: **about.imascientist.org.uk/category/prize-winner/bpswinner/**. At time of writing, one winner has completed and reported on their project.

Winners posted short descriptions of their planned projects:

## **Daniel Jolley**

#### Society Zone, June 2018

During June's 2018 Society Zone event, conspiracy theories were a hot topic of conversation. Using the prize money awarded, I wanted to continue the conservations and bring to life the psychology of conspiracy theories. To do so, with the £500 I commissioned More Than Minutes to draw my research into an engaging cartoon.

... I want to ensure the artwork is used for public engagement. I have embedded the artwork into my public talks on the psychology of conspiracy theories, whilst developing a lesson plan around the topic area for school children.

... At the time of writing, I have given three public talks and the session has been delivered to three sets of school children — approximately 150 people have been given postcards so far. The YouTube video has been watched just shy of 400 times.

**Right:** Artwork created as part of Daniel's winner project



Daniel has completed and reported on his project. Read Daniel's full report at: about.imascientist.org.uk/2019/what-daniel-jolley-did-with-his-prize-money/



#### **Sam Burton**

Wellbeing Zone, June 2018

I'd like to run a talk that students from local schools and colleges can come to, to see the work done in our research group. This would include getting to go in the labs and use some of our equipment that we use in actual studies.

#### **Abbie Jordan**

**Childhood Zone, November 2018** 

I want to hold an exhibit at a local science centre for children and families ... I am keen to look at how young people and families think about, remember and talk about pain.

## **Vassilis Sideropoulos**

Perception Zone, March 2019

I will spend it on organizing different types of events, conferences, practical classes or informative seminars, to showcase how Psychologists are not only doing one thing.

#### **Alex Reid**

**Memory Zone, November 2018** 

I would use the prize money to create a small yet much needed library of demos myself and other staff members in our department can use at these events.

#### **James Munro**

**Relationships Zone, March 2019** 

I would try to set up a special day where school children and their parents could come to learn about how brain scanning works and how it can be used to learn more about our minds.

# **Publicity**

Congratulations to the winners of our two I'm a Scientist zones; **The British Psychology Society**; 19 November 2018:

bps.org.uk/news-and-policy/congratulations-winners-our-two-i%E2%80%99m-scientist-zones

I'm a psychologist, get me out of here!; **The British Psychology Society**; 4 March 2019: bps.org.uk/news-and-policy/%E2%80%9Ci%E2%80%99m-psychologist-get-me-out-here%E2%80%9D

Edinburgh Napier technician wins 'I'm a Scientist, Get me out of here!' competition, Edinburgh Napier University; 11 April 2019:

napier. ac. uk/about-us/news/edinburgh-napier-technician-wins-im-a-scientist-get-me-out-of-here-competition

James is the students' favourite; **The Edinburgh Reporter**; 15 April 2019: theedinburghreporter.co.uk/2019/04/james-is-the-students-favourite/

*Technicians get the student vote in 'I'm a Scientist*, Get Me Out of Here!'; *Technicians Make it Happen*; 15 April 2019:

technicians.org.uk/technicians-get-the-student-vote-in-im-a-scientist-get-me-out-of-here



# **Future plans**

Over the coming twelve months **6 new school zones will be run**:

- Two zones in June 2019 Mental Health Zone & Influence Zone.
- Two zones in November 2019 (including an Enquiry Zone).
- Two zones in March 2020 (including a 6th form zone).

# **Enquiry Zone - November 2019**

One of the November zones will be an Enquiry Zone for primary school students.

Participating psychologists will each put forward an experiment proposal which the students could carry out themselves in school. During the event, students will vote for the experiment they want to do. In the year following the event, the winning psychologist will work with participating schools to refine, carry out, and then analyse the results.

# **Student Perception Zone - March 2020**

In September a call will be put out to BPS members on IAS lists offering the chance to be involved in a Student Perception Zone. Using the content generated by students (questions, chat messages), they will be able to research young people's perception of a particular topic. The participating BPS member will be responsible for ethics approval and open access publishing of results.

The BPS will provide 50% funding for the zone. Mangorolla will work with the member to obtain the remaining funding from a source relevant to the subject they propose. The Zone and member will be chosen based on the idea and our ability to raise the remaining 50% of funding.

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