



# Bridge: A MindSport For All

*Connects People, Challenges Minds*

Youth Bridge Education in the UK: A scoping study of young people's experiences of learning bridge and bridge teachers' approaches to teaching bridge

**BAMSA Report (2024)**

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## Summary

This report presents the findings of a scoping study designed to explore young people's and bridge teachers' attitudes towards bridge and mindsport education. The study provides initial insight into the youth bridge landscape and establishes parameters for further research, advocacy, and collaboration within mindsport studies.

Three research questions guide the enquiry and analysis in this pilot study:

1. What are bridge teachers' approaches to bridge and mindsport education?
2. What are young people's experiences of learning to play bridge?
3. What are the benefits of bridge education for youth?

Ten younger players (aged 18–25 years) and eight bridge teachers who reside in Scotland and England took part in semi-structured interviews and detailed their experiences of learning and/or teaching bridge.

The research findings demonstrate the value and impact of bridge and mindsport education. Of note, they show that:

- 1) Bridge teachers are keen to “spread the good word about bridge”.
- 2) There are seven common principles of good teaching: pace the lessons and tailor their difficulty; stick to the basics; make the lessons enjoyable; establish partnership learning pairs, but also vary the groupings; teach decision-making; encourage reflection on the lessons learnt in class and emphasise the value of practise; the teacher should be a friendly face and establish a supportive class atmosphere.
- 3) There are differences between teaching children and adults.
- 4) Young people value the enthusiasm and openness of bridge teachers.
- 5) Young people would like bridge teaching to strike a balance between learning and playing.
- 6) Young people wish that they had started learning bridge earlier.
- 7) Bridge is a lifelong interest that is “endlessly fascinating”, and one that has a host of cognitive and social benefits.
- 8) Teachers and young people believe that the main benefits of bridge are: confidence and well-being; travel; competition; mathematical reasoning; life skills; coping with making mistakes; intergenerational learning; relaxation (in casual bridge); sportsmanship and decorum; memory.
- 9) There are challenges facing youth bridge: there is a lack of awareness of what bridge is; bridge competes with many other extracurricular activities and hobbies for young people's attention; insufficient time is dedicated to bridge and enrichment activities in schools.
- 10) There are opportunities for future research that explores, for example: the principles of good teaching; young people's preferences for different modes of teaching; the opportunities and challenges associated with the practical implementation of bridge and mindsport education.

## Introduction

The goal of contract bridge – as implied in its name – is to deliver on a contract or defeat it. A deck of cards is dealt equally between four players, and each player assesses the strength of their hand through the value and length of the suits. The bidding begins, and high-value cards that can overrule, or trump, the suit or value of the cards played are nominated. A contract is set; one partnership of two players aims to reach the minimum number of tricks needed to win the contract, while the other partnership attempts to prevent them.

A technical description of bridge such as this will be familiar to bridge players, who have already mastered the ‘language’ of bridge and who understand its rules and conventions (their lifelong learning notwithstanding). A different matter altogether is the development of implicit and tacit knowledge of the card game bridge in young learners, and the identification of the most effective means of easing their introduction to the mindsport. The opportunity to introduce a new generation to bridge raises important questions about the fundamental nature of learning and the future of the mindsport. How, when, and where do young people currently learn bridge, and how is their social experience of learning constructed? What innovations in bridge teaching might the future bring?

To explore these fundamental questions, “Bridge: A MindSport for All” (BAMSA) is launching a comprehensive programme of research that centres on youth bridge and mindsport education. This report presents the first results of this research, which originate from an early pilot study of young people’s experiences of learning bridge and bridge teachers’ approaches to teaching bridge. These findings contribute to the generation of insight into the domain of bridge education, and establish parameters for further research, advocacy, and collaboration within mindsport studies.

Three research questions were used to guide the enquiry and analysis in the pilot study:

1. What are bridge teachers’ approaches to bridge and mindsport education?
2. What are young people’s experiences of learning to play bridge?
3. What are the benefits of bridge education for youth?

## Methods

This study was conducted by a team of BAMSA researchers who aimed to map the views and experiences of two groups of participants:

- Younger players (aged 18–25 years) resident in Scotland or England;
- Bridge teachers/tutors, also resident in Scotland or England, who teach young people and adults in a range of settings (at home; at school; within bridge clubs).

The research was carried out over 2020 and 2021 and coincided with the COVID-19 pandemic. For this reason, the research participants were recruited online, and semi-structured interviews were conducted remotely (using videoconferencing platforms such as Microsoft Teams or over the telephone). The interviewees chose their preferred mode of communication.

The sample of participants for the research consisted of ten young bridge players (Table 1) and eight bridge teachers (Table 2) who live in Scotland and England.

Table 1. Details of the sample of young people

Interview Duration	Participant ID	Gender		Geographical Location		Data Collection Method		
		Female	Male	England	Scotland	Online	Telephone	Email
01:18:03	YP01		*		*		*	
00:57:47	YP02		*	*		*		
01:01:18	YP03		*		*	*		
00:54:29	YP04		*	*		*		
01:19:15	YP05		*		*	*		
01:10:54	YP06	*			*	*		
01:11:14	YP07	*		*		*		
00:48:18	YP08	*			*	*		
00:42:59	YP09	*		*		*		
Email response	YP10	*			*			*

Table 2. Details of the sample of bridge teachers

Interview Duration	Participant ID	Gender		Geographical Location		Data Collection Method		
		Female	Male	England	Scotland	Online	Telephone	Email
01:14:51	TT01		*		*		*	
0:50:17	TT02		*		*		*	
01:18:37	TT03	*			*		*	
01:14:25	TT04		*	*		*		
01:25:17	TT05	*		*		*		
01:12:57	TT06	*		*		*		
00:55:33	TT07		*		*		*	
00:55:33	TT08	*			*		*	

## Findings

### Approaches to bridge education

#### Teachers' views on bridge education

One of the main aims of the semi-structured interviews was to map the landscape of youth bridge education, with particular focus on young people's experiences of learning bridge and teachers' approaches to teaching bridge.

The bridge teachers first spoke about their motivations for teaching, expressing an inclination to not only help others, but also “*spread the good word about bridge*” (TT02, Scotland). One teacher elaborated further on sharing the ‘gift of bridge’ with young people:

*I'm really passionate about bridge. I think it's just really, I think it is so good for you and I think it is the best hobby ... I am quite passionate about it, and I just think people should play. That's the only motivation I had really for doing it, you know, I really believe that it's a great thing for people to do, and I think it's a gift to get somebody on that journey. (TT06, England)*

Several teachers also remarked on their surprise upon discovering just how rewarding and enjoyable teaching bridge can be. For example, TT04 said:

*It is a large part of why you do it, you know if you think you have helped somebody get to a point where they have a much better social life or some social life and is much happier in their place in the world, then why on earth would you not want to do that as often as you can you know? (TT04, England)*

With regard to teachers' entry into bridge teaching, one main pathway of entry was apparent: commencing teaching after retiring from their schoolteacher careers. This pathway was detailed by several teachers, who applied their prior professional experience as schoolteachers to the subject of ‘bridge’, and who saw bridge teaching as a natural continuation of their teaching career. An additional facet of the decision to teach bridge is teachers' passion for the mindsport, combined with their noble motivation to introduce its benefits to a new generation. A Scottish teacher explained:

*I was just a teacher at the school and it's kind of natural for schoolteachers to have a club, and it's something I'm interested in and I feel confident enough to teach, you know. I'm pretty keen to spread the word, and I thought if I can get a few kids interested that would be a good thing to do. (TT02, Scotland)*

The bridge teachers then spoke in more detail about their approaches to teaching bridge, and shared stories and examples of their best practices in bridge teaching. In general, teaching methods revolve around teaching good card play, bidding, anticipating common situations, and bridge etiquette.

## **Seven common principles of good teaching were identified:**

### **- Pace the lessons and tailor their difficulty:**

*Some pick up quite quickly and easily, others not so, and you get a few who will always struggle, so try to go at a reasonable pace that suits the majority the best. (TT01, Scotland)*

### **- Stick to the basics:**

*All of their no-trump responses, all of the rebids, all of their limit bids off by heart, and then their structure is there and then they can start playing around with it. I think people move on and try and add stuff and they're getting that wrong... it is the bread-and-butter stuff. (TT06, England)*

### **- Make the lessons enjoyable:**

*The most important thing is that they enjoy it, the only barrier that I want them to get over is that they are enjoying it, and it doesn't really matter how good or bad they are. ... I say the only bar that they need to get over is if they are enjoying it and if they're enjoying it that's as good as it gets. (TT04, England)*

### **- Establish partnership learning pairs, but also vary the groupings:**

*In a classroom I let people sit together, you know, people will start gravitating towards each other and forming their own little groups and form their own tables. And as a teacher you try and move them around, you know, you want them to be in a group of friendly people who support each other and that they can learn at their own pace, but you don't want them just to get just to play in that group all the time. (TT06, England)*

### **- Teach decision-making:**

*I keep saying the same thing to my class: when I have got an awkward decision to make and I say, 'you could go left or you could go right', if you were to ask ten world champions this question, five would go left and five would go right, but all ten would justify the decision. And bridge can be like that and sometimes, yes, there is a clear route to take, but quite often it is not clear and you get quite a difference of opinion. (TT01, Scotland)*

### **- Encourage reflection on the lessons learnt in class and emphasise the value of practise:**

*I think what is important is that they do the homework every week so that they are putting into practise what they have learned in class, and when they get a bit better I encourage them to play with their friends ... I am always pulling them up and always give them a little bit more than they can chew, always, so there is always something to reach for and every lesson should be like that. (TT05, England)*

### **- The teacher should be a friendly face and establish a supportive class atmosphere:**

*I think the director needs to play a very important role with the students in making them feel comfortable. And I think it's really up to the director to explain that they are there to help them and that they are the other friendly face of the club. (TT06, England)*

*I try and draw them out of that if I can so you can have a bit of banter, you know. (TT01, Scotland)*

## Differences between children and adults

Some notable differences between teaching children and adults were identified by the bridge teachers. Children are “*much quicker*” whereas “*adults can take a long time*” to learn (TT03, Scotland) and they are also “*more keen to throw themselves into a competition whereas adults might be more wary of not doing well*” (TT02, Scotland). It was also noted that young people differ from adults in their preferred ways of learning. For instance, one teacher said:

*My son is just doing a Masters, I taught him how to play, but they are learning in a different way, and he has no interest. You know, if I said to him like ‘you could join an online bridge course for two years’, he would say ‘mum you have got to be absolutely joking’, you know, they learn in a different way. He would just watch a YouTube video to show him how to do something, and then he would just follow out those instructions.*

*I think they don't learn in this structured linear fashion the way that we teach, or the way that we used to teach or the way we would be in a classroom. I don't think there's anything wrong in just teaching him in it in a different way. Teaching them the exciting stuff you know, showing them really wildly unbalanced hands and showing them, you know, how to sacrifice, and you know, the bits of bridge that are more like poker. (TT06, England)*

## Young people's views on bridge education

In a similar strand of enquiry to that asked of teachers, young people were asked to provide their input on the teaching approach of bridge teachers, and to identify teaching methods that are particularly well-received and effective. Overall, the interviewees felt that there were many positive aspects of bridge education and referred to specific best practices that they had observed in the bridge classroom.

Upon describing the setup of the classroom and the teaching, the young players highlighted the importance of striking a balance between learning and playing (also sometimes referred to as ‘practise’ or ‘conditioning’, but ultimately seen as disparate from structured learning). All the examples of bridge lessons given incorporated an element of formal instruction (e.g., learning theory) and an element of informal instruction (e.g., playing hands to apply the formal techniques and concepts).

The formal lesson typically lasts 15–30 minutes and is delivered at the start of the session. After each hand is played, or towards the end of the session, the teacher may pause the play to discuss “*the question of why, why did that happen*” (YP07, England). The full session itself “*is normally a 2-hour session*” and “*the teaching is 30 minutes so you get an hour and 30 minutes of gameplay*” (YP03, Scotland). YP03 later noted that “*the explanations of what you should do would take too long so they just let us play on our own*” and that each week is devoted to a different topic “*it's like one thing a week and you focus on that during the games*” (YP03, Scotland).

The informal, free play portion of the lesson is seen to complement the formal one, as concepts that may have not been grasped during the formal portion of the lesson are reinforced and become better understood during the applied portion of the lesson:

*On the Wednesdays, which I think is helpful actually, we do a kind of short lesson before we start, so our teacher will talk us through a bit of theory, and it usually goes right over my head; that's not true, I'm getting there! And we have a wee chat and he'll get some of the intermediate to explain to us beginners. You know, what X or Y feature of the game is, and then hopefully once we get playing we can actually see a situation where it comes up and you get to apply it. (YP05, Scotland)*

An increased degree of player agency and enjoyment is associated with free play learning, because players are given the opportunity to practise their decision-making skills and make mistakes:

*That is quite a nice sense of pride when you win a game without anybody else's help and I feel like you learn better when you do it yourself than when somebody tells you what to do. (YP03, Scotland)*

*I suppose I see it as mainly fun, and hopefully I can solidify something into my mind as I play it ... that's the only way that I would consider learning it. I would not put myself through a course of, you know, self-study, or if I had some sort of online curriculum where I had a lesson a week or something that would be too structured and that would cut into the to the kind of relaxed informal vibe that I like about it. (YP05, Scotland)*

*I have heard from players that they learn best when they play and that they learn from their own mistakes. (YP06, Scotland)*

The participants highly valued the social support and openness of the bridge teachers and volunteers, who provide individualised support and encouragement. This is facilitated by not only adequate staffing and resourcing, but also the teachers' and volunteers' personalities and commitment to high-quality teaching and the game of bridge itself. For example, in relation to the staffing levels in the classroom, YP01 said:

*They had quite a lot of helpers come in, so I think in our group there was maybe between 10 and 12 and they would often be 3 or 4 adults from the local bridge club, which meant that you got very small groups and individualised tuition which I think is also quite important ... I think it was a combination of a well-defined structure along with the right ratio of teachers to students. (YP01, Scotland)*

The teachers' commitment is appreciated by many, with one young person remembering their teacher as a "keen, committed math teacher who we all liked learning from [and] who is passionate about bridge" (YP04, England). Another young person also remembered their teacher fondly, calling him "the Gordon Ramsay of bridge" and later elaborating: "he does pretty much insult everyone for being really bad compared to him at bridge, which is quite funny and I think that gives us a little bit more motivation to do well, you know, it's like a social event where you can have fun" (YP03, Scotland). The teachers provide on-going encouragement that assuages any concerns and increases' players optimism about learning:

*She taught at her home on a Sunday and she would, you know, when you got to a certain point, would say 'please come along, at first you won't know what's going on very well, it will be quite intimidating perhaps, but keep coming along, keep playing and you will start*



*to learn through that process of being there, hearing the discussions, and getting involved', and that was a really helpful tool. (YP01, Scotland)*

The sociability of the learning environment is seen as an advantage because this creates a relaxed environment where all learners and teachers are familiar and friendly with each other:

*It's not just a bridge club, they are part of a big Sports Club, so they've got tennis courts. They've got like a Cricket Club as well and there's a there's a bar connected so often when people had finished the session they would go grab lunch or get a drink and then everybody just sat afterwards and it was very friendly and just chatty. (YP09, England)*

In addition to inviting accounts relating to young people's experiences of learning, the young people who took part in the research were asked about their introduction to the bridge world, and the circumstances surrounding their decision to start learning bridge. The age of introduction for each interviewee varied; however, most had started learning in late primary school (e.g., P7, ages 10–12) or early secondary school (e.g., S1–S4, ages 11–16). The ideal age at which young people should begin learning bridge was considered to be in the same age range (10–16 years of age) because “*people enjoy playing card games at that age*” (YP04, England). One participant thought that “*late primary is a good time to get into it and it really does help with like developing your mathematical and logical thinking*” (YP08, Scotland), and another thought that “*starting in secondary schools is about right*” (YP04, England).

When asked whether the timing of their own introduction to bridge was too early, too late, or just about right, most young people said that they would have ideally wished to have learnt bridge a bit earlier, as that would have afforded them more time to develop their skills. Such a preference was echoed by more than half of the participants, and it suggests that starting as early as possible might be preferable:

*If I could learn much earlier, I would have been much better by now, so I would have had more depth of the game available to me. (YP05, Scotland)*

*If I had any regrets, it would be that I didn't find out about other opportunities sooner. I could have learned quicker. I could have been involved in European and World Championships and things like that which I feel like 14- or 15-year-old me would have enjoyed playing. (YP04, England)*

## **The benefits and opportunities of learning and playing bridge**

When asked about the benefits of bridge, both teachers and young people spoke about their positive views of the game, the numerous benefits that it offers to young people, and their reasons for playing, learning, and teaching bridge.

The overwhelmingly positive response related to the participants' views of bridge that pertain to its intellectual and social aspects. As summarised by one teacher, “*there are loads of benefits*” ... “*not just your brain and keeping your brain active, there are lots of social benefits as well*” (TT03, Scotland). Other teachers similarly thought that bridge is not only “*a mental challenge, a puzzle to be unravelled*” (TT01, Scotland), but also a “*great game for allowing you to collect stories*” (TT04, England) and “*bringing people into your life*” (TT06, England). The sophistication of the game of bridge is such that it lends itself well to lifelong learning, and in turn, to providing

the novelty and challenge needed to class bridge as a mindsport. This was elaborated by multiple teachers:

*The more you play and the more that you want to learn, the more you can learn. And the more you learn, the more you can improve, so it's what I would say is a never-ending process. (TT01, Scotland)*

*It is so endlessly fascinating, you never get to the end of the journey, there is always something new to learn, and because you never pick up the same hand twice, it is never boring ... it will give you a lifelong interest, and if you love it at the beginning, what you put in it is what you will get out, and you will get out of it a lifelong interest. (TT05, England)*

The lifelong interest in bridge is beneficial not just intellectually, but also socially, because it facilitates lifelong friendships and community-building that creates resilient social networks. One teacher explained that this social aspect is a strong argument for the need to teach bridge in schools:

*If you get a group, say you get a new class that starts, and you get six different people who do not know each other, within four or five sessions they will have bonded. They have bonded for life. ... It should be taught in schools, it should be part of the curriculum, even if it is just an hour a week, it is just such a fabulous game. (TT08, Scotland)*

Using examples from their own experience, young people also described their enjoyment of playing as being rooted in the intellectuality and sociability of bridge. Their first-hand accounts of learning and playing bridge centred on the enjoyment of playing elicited by the process of logical thinking, the satisfaction of making the correct decision, and the experience of knowing that there is always more to learn. The young people interviewed said, for example, that “*the more complex it gets, the more fun it gets because there are more variables*” (YP03, Scotland), and that “*it is always interesting and pleasing to get to the end of a hand that was played really well*” (YP04, England). More specifically, they reported immense enjoyment of the consideration of possible moves and the experimentation with different strategies. To illustrate this, one young person gave an example of his inner monologue throughout the course of the game, and another explained that he might save a card for later to enable better plays:

*OK, what's he gonna do? What might he do, and what might the defenders do in response? What should I do and how can I maximise my chances of winning here? (YP05, Scotland)*

*I feel like I'm just scratching the surface of what I can do or what there is to do in bridge. So it is quite nice to experiment when you are in games because you are like 'oh maybe I could do this to save this card later or maybe I can bait my opponent out with this card and play this one later'. I feel like there's lots of stuff I haven't tried in bridge yet. (YP03, Scotland)*

The social benefits of bridge are identified as fostering a sense of belonging and identity in young people, which allows them to not only forge new friendships, but also to connect with a wider community, and in doing so, to add an additional facet to their identity. Reflecting on this effect, YP01 explained:

*It keeps me entertained, it is never dull, and I've made countless friends through it, so I play bridge because it has become such an important factor in my life really ... if you are*

*asking questions about me it would be one of the first monikers that I would identify myself under, it's one of the things that helps define who I am. (YP01, Scotland)*

**The main benefits of bridge, as seen by teachers and young people, are:**

**- Confidence and well-being:**

*Confidence and well-being, all of those things in turn could be considered to be benefits of bridge but for me personally, definitely, for mental well-being it has been excellent. (YP01, Scotland)*

**- Travel:**

*That student came in and spoke to the whole of the fifth and sixth year in an assembly, about all the great times that he had had, you know being at London, Estonia, Poland, all the places that he had been that you just don't get a package holiday to. (TT08, Scotland)*

**- Competition:**

*Children love the minibridge in primary school, they absolutely love it, you know, they love the competitive side of the bridge, and you tend to pick up the ones who are not sporty but you also pick up the good all-rounders, you know, you pick up the ones who are clever, the ones who are good at Maths and good at anything they want to do, so they play bridge in primary school. (TT05, England)*

**- Mathematical reasoning:**

*Maths is about is creativity, and thinking, and problem-solving, and doing things in the best possible way, and using good approaches ... it's the reasoning that makes bridge like maths ... a couple of years ago that all the kids in the bridge club were doing well in maths that year because I'm their teacher, and a lot had moved up math sets, and it kinda got me wondering if there was some kind of link there. (TT02, Scotland)*

**- Life skills:**

*I think you get much better at thinking in long terms so I would have to say if I need to start budgeting now that I'm in uni, I feel like I could maybe do that a bit better than I could previously. (YP03, Scotland)*

**- Coping with making mistakes:**

*I think it does help them with interactions because bridge is kind of a game of regret because you learn to cope with making mistakes. (TT02, Scotland)*

**- Intergenerational learning:**

*Older folk have more knowledge – in my mind anyway – and that's always been true in the context when I've played bridge anyway, you know, older folk know what they are doing whereas the younger folks are just learning and that's a nice element as well. (YP05, Scotland)*

**- Relaxation (in casual bridge):**

*It's somewhat relaxing. It's enjoyable to do it, especially if you, like you've got a partner or some partners that you, like, really get along with. And it's nice to just sit down and have a*

*chat and play some cards. It's good for the social aspect if you want to play more relaxed, that's good, and if you want to play more competitively, you've got that option as well, like. There are many ways that you can play it. It doesn't have to be competitive or it doesn't have to be relaxed if that's not your thing. (YP08, Scotland)*

- **Sportsmanship and decorum:**

*As for what bridge has taught me as a person, I think it has taught me a variety of skills. It has made me a better competitor in terms of how to conduct myself, because it is the decorum associated with that, and expectations, and always try and play the game in the fairest possible way. And I think that comes from a combination of my values and the way I've been taught to play, and I think that those are transferable skills to not [only] other games or sports or other ventures, but just as a person to conduct yourself in an appropriate and good manner. (YP02, England)*

- **Memory:**

*The game requires a lot of strategy and focus therefore it's mentally stimulating. Bridge requires you to remember the cards that have been played, I can see how this could be a greatly beneficial game to play to improve memory over time. (YP10, Scotland)*

## Challenges

To provide a balanced overview of youth bridge in the UK, the young bridge players and bridge teachers were asked not only about the benefits of bridge education, but also about the challenges associated with its promotion and sustainability.

They first commented on the current state of youth bridge in schools and bridge clubs, saying that there is room for improvement. The participants noted that “*there's not a ground swell of young people playing bridge*” at school and in bridge clubs in England (TT04, England), and that it is “*frustrating that we do not have much in the way of international standard bridge players*” in Scotland (TT01, Scotland).

When asked about the potential reasons behind the low level of engagement, the teachers pointed to three main challenges: there is a lack of awareness of what bridge is (amongst both adults and young people); numerous extracurricular activities and hobbies compete for young people's attention; insufficient time is dedicated to bridge and to enrichment activities in schools. The biggest obstacle, according to teachers, is that most people simply do not know what bridge is:

*I guess the biggest barrier is that people don't know what it is, and it takes quite a bold child to come along and do something they don't know about or an adult doesn't know about as well. (TT06, England)*

Some young people were also aware of this issue:

*If you've never met people who play bridge, I think because you don't know what it is, you just don't go and see, I guess. I think that is the thing that's hard about promoting bridge is that people do not know it, they don't know what it is, and people are not very interested if they haven't had previous experience. (YP06, Scotland)*

This lack of awareness was largely attributed to the lack of media coverage received by bridge. While bridge had been shown on TV in the 1970s, the teachers thought that there has been a marked decrease in its media coverage. One teacher suggested:

*Maybe we're not shining the lights, looking for those people who are great ambassadors. Maybe it's something that bridge has lost. Bridge is not seeking them out or seeking to elevate them or draw attention to it. (TT06, England)*

The second most prominent barrier is that young people tend to have many other activities on their agenda already, and if they do not, then there are dozens more activities that compete for the same space as bridge. The teachers mentioned chamber choir, PC gaming, football, and arts and crafts as examples of such competing priorities, and one teacher said:

*As soon as they go to secondary school, they have got 50 million things they could do with their time, and you know, the parents want them to do music, they want them to play an instrument, you know ... the parents think that playing bridge is just like playing monopoly, you know, they don't recognise the advantages of playing bridge. (TT03, Scotland)*

The third challenge remarked upon by the teachers is that nowadays, there can be insufficient time at school for the introduction of bridge. The teachers were somewhat critical of schools' and policymakers' decision to de-prioritise enrichment and compress enrichment activities into fewer hours. The lack of dedicated enrichment time meant that several teachers had had to schedule their bridge club during lunchtimes, but they found that this was suboptimal:

*The bridge club is just a lunchtime and we meet twice a week during lunchtimes, so they have their packed lunches with them. That's maybe an hour twice a week and if we're lucky after the food and the messing around they'll maybe play about five hands. So you know compared to people who have actually been in classes we've had pretty little time. (TT02, Scotland)*

Another major challenge identified by both the teachers and young people is that bridge can take too long to learn, and consequently, that it can be “difficult to get the young people to a level that they can really enjoy it” (TT08, Scotland) as “they don't want to spend two years on a course because they don't think it should take two years to do anything, let alone learn how to play a card game” (TT04, England). The young players explained this from their perspective:

*There is a lot to know before you start playing because you need to understand cards, you need to know the suits, you need to understand how trick-taking goes and how systems work, and why you need those systems. There is so much, and I think when you're a beginner, it is very hard to glimpse that. (YP06, Scotland)*

*It's not a game you can just pick up and play. Anyone within five minutes you can teach to play Snap. You take a ball to the park. You can have a kick about in a casual setting, but with bridge you've got to have four people or multiples of four people. You've got to have a part, you've gotta commit to learning the bidding, the play, the scoring, the trick-taking. So even for someone who's familiar with card games, it's not a five-minute job to learn to play bridge. (YP02, England)*

*That can act as a barrier in that it takes quite a long time to feel like you are playing and you are enjoying and even being competitive in the sense of wanting to do the best you can but for holding your own against your peers. (YP01, Scotland)*

## Discussion and recommendations for future research

This scoping study shows that bridge teaching is delivered by bridge teachers who are often former schoolteachers with immense passion for bridge and helping others. Their enthusiasm is evident in their continued and selfless concern for the well-being of young people, and in their decision to teach bridge on a voluntary basis, even after retirement. There is a need to recognise bridge teachers' significant contributions to the bridge community, and to support them in their efforts to maintain and improve player numbers and deliver engaging bridge education.

Future research could explore, in more detail, the common principles of good teaching and means of creating standardised teaching curricula. The best practices of bridge teaching could be publicised more widely, so that novice bridge tutors and volunteers may benefit from learning about some of the tried-and-tested teaching practices. The differences between children's and adults' bridge learning also merit further exploration, not least because they appear to be considerable. It would be useful to understand which teaching principles are equally applicable to both populations. In addition, consideration should be given to the unique ways of learning that appeal to each population.

Young people's views on bridge education demonstrate that for them, bridge is a developing lifelong interest. It is one that is highly valued, and one that they wish they had started pursuing earlier, because it presents a plethora of intellectual and social benefits. In view of young people's reflections on the teaching process, their preferences for different modes of teaching can be investigated further. For example, the bridge learners expressed an inclination towards social- and play-based forms of learning, which enhance agency and encourage learning from one's mistakes. They also communicated an appreciation of certain aspects of teachers' methods and the personality that they infuse into the bridge lessons. Future research can focus on the design of bridge education that is even more 'playful' and sociable, and that leverages teachers' strengths to achieve improved learning outcomes.

The opportunities and challenges associated with bridge and mindsport education also merit closer examination. The small number of young people playing bridge, the low level of public awareness of the existence of the game, and the paucity of publicity and media coverage for bridge are three interrelated challenges that can be addressed through coordinated strategies at the school and club level. Furthermore, a niche for bridge and mindsport education should be secured within schools' programmes and young people's busy schedules so that sufficient time can be spent on this rewarding activity. Indeed, young people who took part in the study emphasised that bridge can take a long time to learn. Given that bridge education requires a moderate-to-high level of commitment to be effective, provisions should be made to ensure the regularity and high quality of teaching input.

## Conclusion

Young people and teachers report that bridge is worthwhile to teach and to learn, citing its numerous benefits. The participants suggest that bridge education improves young people's confidence, well-being, mathematical reasoning, life skills, intergenerational learning, relaxation, memory, and recovery from mistakes. Thus, bridge has the potential to address many of the priorities and challenges of primary and secondary education. In respect of this, the evidence generated from the "Bridge, Youth and Mindsport Education" research project should be applied towards the expansion of the delivery of bridge-based extracurricular activities in schools, increasing the awareness of the benefits of such activities, and the development of a bridge and mindsport agenda for the UK that focuses on young people's well-being and skills development.

## Acknowledgements

We give our special thanks to the interviewees for sharing their experiences, to Kevin Judge who undertook the data collection for this scoping study, and to Tash Lundin for proofreading.