

**The PAX Good Behaviour Game (PAX GBG)** is a universal classroom based intervention programme that aims to support and develop pupils' social and emotional competencies and behaviour by providing opportunities for them to develop self-regulation, self-management and self-regulation skills in a fun way. The evaluation of the programme, in the Irish context, strongly points to an overall calmer and more stable classroom environment, resulting in increased pupil emotional regulation and well-being, increased focus and concentration on learning with higher academic achievements across many domains of learning.

### **PAX GBG and the classroom**

Children's capacity to engage with learning, to manage their behaviour and to regulate their emotions is an essential skill which enables them to benefit from the academic and social learning opportunities provided in schools. Many teachers however identify disruptive and inattentive classroom behaviours as key barriers to students' learning. International research extending over 30 years has shown that the PAX GBG is one of the most effective evidence based school programmes in developing pupils' pro-social behaviours resulting in significant positive outcomes with respect to self-control, self-management and self-regulation. PAX GBG is not a classroom management programme nor is it about consequences and control, on the contrary, it recognises the active agency and power of the pupil to self-direct their own behaviour under guidance and support from the teacher implementing the programme. The outcomes of the PAX GBG programme point to significant changes in the classroom resulting in the development of a respectful, peaceful and productive classroom learning environment. By implementing the PAX GBG programme effectively, teachers gain back significant amounts of class time to engage in more quality teaching and learning activities and to offer additional support to pupils in need.

### **PAX GBG and youth mental health**

PAXGBG enables teachers to develop pupil's self-regulation, self-control and self-management skills in a positive way that immediately engages both the teachers and pupils. By learning how to self-regulate their emotions and get on with others, express their feelings, have healthy self-esteem, be independent and solve problems for themselves, children are set on the path of better academic outcomes, better mental health and are equipped with skills that will help them succeed throughout their lives, both at work and in relationships.

These lifelong skills, will reduce future negative risk taking behaviour and so maintain or move children to a more positive and robust developmental trajectory socially, emotionally and academically.

## Evaluation one: The Irish Pilot of PAX GBG (Morgan and O'Donnell 2015)

The pilot evaluation of PAX GBG was conducted by Professor Mark Morgan and Dr Margaret O'Donnell from St Patrick's College, Drumcondra between January and May 2015.

21 first and second class teachers and two mentors were trained in PAX GBG by Dr Dennis Embry in January 2015. Following the training, each of the teachers implemented the programme in their classes over a 12 week period with the support of a mentor who visited on 4/5 occasions during this time. The programme comes with a resource pack for each teacher which supports high quality implementation. As the programme was being implemented it was being evaluated by independent researchers who set about measuring its impacts and outcomes.

The evaluation involved the researchers visiting each classroom before the implementation of PAX GBG commenced and after the 12 week implementation was completed to observe and quantify off task behaviours of the pupils. Teachers were also asked to complete Strengths and Difficulties Questionnaires (SDQ) for each pupil before and after the implementation phase, (396 children). The researchers also conducted face to face interviews with the teachers before and after the implementation phase.

### The key findings from the research were:

- An **average reduction of 43% in off task behaviours** across the 21 classrooms (Classroom observations)
- Highly significant reduction in the incidence of hyperactivity (restless, overactive, cannot stay still for long) (SDQ)
- Highly significant reduction in emotional symptoms (many worries, often seems worried) (SDQ)
- Highly significant increase in pro-social behaviours (helpful if someone is hurt, upset or feeling ill) (SDQ)
- Highly significant reduction in total problem scores (SDQ)
- Almost one third of the children reported by teachers as displaying challenging behaviours at the start of the study were reported as showing behaviours within the normal range after the 12 weeks. (SDQ)
- There were no differences in outcomes based upon urban or semi-rural, gender or age of pupil

Feedback from teachers demonstrated the positivity generated by PAX GBG in their classrooms. Classrooms had become calmer; children were taking positive control of their behaviour and teacher/pupil relationships had been positively impacted. An interesting feature of the teacher comments was the positive impacts reported for both themselves as teachers and for their pupils.

### What were the benefits for the children with the highest needs?

There was a **decrease of 29% in the number of children with total problem scores** in the

Borderline/Challenging range after 12 weeks using PAX GBG in the classroom.

SDQ scores by range

	Before % n	After	% change
No difficulties	79.4 (304)	86.3 (345)	13.4
Borderline	10.4 (40)	6.3 (25)	37.5
Challenging	10.2 (39)	7.3 (31)	22.0
Borderline and challenging	20.6 (79)	13.6 ( 56)	29.1

## Evaluation two: (O'Donnell, 2016)

The second evaluation of PAX GBG was conducted by Dr Margaret O'Donnell from St Patrick's College, Drumcondra between January and June 2016.

The overall objective of the second study was to build on the first study by exploring the extent to which PAX GBG decreased classroom off task behaviour with a broader age range of pupils and to assess stability of any change as measured by two observations before implementation and two after 6 months of implementation.

An independent researcher completed two pre PAX implementation and two six month follow up classroom observations, recording pupils' off task behaviour. Observations were completed in 11 classes in DEIS schools in Dublin. The observations targeted a combination of classes ranging from Junior Infants to 4th class - aged 4-10 years (pre - January, n196 for observations 1 & 2, total = n392) and (post -June, n162 for observation 1 & 161 for obs. 2, total = n323) - this represented a wider span of classes than in the previous evaluation where all pupils were either from first or second class (n=420) and were aged between 7 and 8 years.

The teachers completed the standard two day training and a PAX GBG Partner (Mentor) - provided an average of 4 mentoring and support visits to the teachers where they provided advice and guidance on all aspects of the programme implementation and on the use of other PAX GBG resources as required.

### The key findings from the research were:

Levels of observed off task behaviour were relatively stable both before PAX GBG and after six months of PAX GBG, differences between pre-intervention observations 1 & 2 were not statistically significant, likewise the post intervention observations 1 & 2 were not statistically significant. However, for both post interventions the level of SPLEEMS observed per hour in comparison to the pre-intervention observations showed an **average reduction of 58% in off task behaviours across the pupils** (T1= 392, T2= 323). This difference was statistically significant  $p < 0.001$ .

## OFF TASK BEHAVIOUR PRE AND POST MEAN & STANDARD DEVIATION

	Pre		Post			% change
Overall	Mean	39.1	Overall	Mean	16.5	-57.7%
	SD	13.0		SD	8.7	
Visit1: Jan	Mean	38.1	Visit 1: Jun	Mean	18.9	
	SD	10.9		SD	8.8	
Visit 2: Jan	Mean	40.2	Visit 2: Jun	Mean	14.2	
	SD	15.2		SD	8.3	

While it could be argued that self-regulation is more difficult for younger pupils who have just started school, in this study all classes of Junior Infants showed improvement in self-regulation as evidenced by the reduction in off task behaviour from pre to post implementation. Third and fourth classes recorded the lowest level of off task behaviour following the PAX GBG implementation.

This study demonstrates not only the improvements in pupils' behaviour but it also points to the increased opportunities provided to enhance learning and active engagement with the curriculum for pupils across different class levels.

## Qualitative study (Hegarty, 2017)

### Introduction

The Department of Public Health, HSE, Dublin Mid-Leinster led and facilitated an independent qualitative research study to capture the experiences and lessons learned by the Irish teachers who implemented the PAX Good Behaviour Game (PAX GBG) programme and the experiences of their school principals.

The aim of the research was to prepare a report based on the information gathered from teachers and principals that will enable the further development and scaling up of PAX GBG.

### Sample

The sample target population was the 120 teachers who had been trained in PAX GBG and their principals. 63 (>50%) teachers completed the online survey and five school principals completed a telephone interview. Mostly open questioning was used.

### Analysis

A content analysis was undertaken using the qualitative data analysis package, NVIVO 11. The resulting framework has four main sections for principals and for teachers covering Starting up, Implementation, Impact and Recommendations/Advice

## What Teachers said:

### Start up

There was evidence of initial general enthusiasm and optimism coupled with concerns relating to training and the extent of resources required to support effective programme implementation.

Their initial concerns before take up were:

- Would the children buy into the programme?
- Would the programme work?
- Would it would increase their workload?
- Would they have the confidence to deliver it?

### Implementation

With regard to programme implementation, teachers reported that the programme was easy to set up and to use, and overall that children loved it. A few responses indicated that some teachers took some weeks to build their confidence with the programme.

Teachers generally found that playing the PAX GBG game helped them to use their time in the classroom more effectively in that the elements of the PAX GBG programme brought a fresh and fun approach to their teaching, classroom management and their relationships with the children. Most of the children engaged very well with PAX GBG and they got involved in running it and reminding the teacher to play the games if they forgot. A few teachers found it difficult to get used to using the language of PAX GBG and some had initial reservations about it. However, teachers reported that children enjoyed the PAX language and there was evidence that its positive focus had an effect, which spread within the classroom. Teachers indicated, that there were times, when they needed to make adaptations to the programme, mainly for young children in the infant classes, e.g. teachers writing the 'tootles' for younger children, or implementing the programme at a slower pace.

### Challenges

While teachers experienced some initial challenges in delivering the programme, they indicated that most of these were resolved as engagement with the programme progressed. A few children were reluctant to get involved in the programme, and a few more actively resisted it. Teachers stated that sometimes children who resist could spoil it for the others, however these issues in the main were resolved as the programme got underway. Where issues persisted, they related to the need for consistency, particularly where there were clinical levels of need for particular pupils.

### Impact of Programme

Perspectives on the impact of the programme generated themes mainly in relation to the impact on the child and on the teacher, both intertwined with the improvement in the atmosphere in the classroom. There was also evidence of the lasting effects of PAX GBG and all of the teachers intended to continue to deliver it in the following academic year.

### **Impact on Children**

Teachers provided numerous instances of children being able to self-regulate and control their own behaviour. Behaviour had really improved within the classroom, and according to teachers even where behaviour issues still arose, there was less fallout as there was no need to single out behaviour of individual children.

The increased ability of children to focus and concentrate was notable from the responses. Concentration improved both in length and quality and contributed to the children being able to work on their own more than previously. Classes were quieter, yet there was more of a sense of fun.

There was an impact in terms of extra learning within the classroom, and also learning of higher quality. This applied to classes that were fairly productive even before PAX GBG as well as to classes where there were behaviour problems and many interruptions occurring during the day.

Relationships improved, both between the children and between teacher and child. Children were more able to listen, were less anxious and had more confidence in themselves. They also showed more respect for each other and were more likely to engage in the 'PAX behaviours' of sharing peace and happiness. They were more ready to praise others and to consider their own relationships with them. Even the children who were not totally engaged by PAX GBG got involved because of the group work and the associated sense of responsibility.

### **Impact on the classroom**

The impact on the classroom was related to children being happier and more confident, and a calmer environment in the classroom with much 'fun' introduced. This in turn affects both child and teacher and the work that is done in the classroom. Anxiety and/or stress in the children was lessened.

### **Impact on Teacher**

Teachers' comments on the impact of the programme centred mainly on issues relating to behaviour and/or management issues together with the increase in teaching time more active engagement with the curriculum and higher overall achievement levels. One of the main elements discussed here was the reduction in teacher stress which in turn led to a calmer classroom environment and increased enjoyment of teaching. Teachers were relieved not to be constantly correcting pupils, resulting in less anxiousness around behaviour problems and overall better relationships between teachers and pupils.

### **Teachers Recommendations and Advice for others considering the programme**

Almost all of the teachers who responded would recommend the programme. The programme had given them a renewed vigour and enjoyment in their teaching career – it was regarded by some as 'the most rewarding programme they had ever trained for'. Their recommendations included being thoroughly prepared beforehand, to introduce the programme gradually and with consistency particularly in relation to younger children.

## What Principals said:

### Starting up

Principals heard about the programme through other professionals/organisations, promotional meetings, other schools using the programmes. They were influenced to adopt the programme by the information received, the quality of the system and the evidence behind it, the potential for it to 'fit' (policies, other programmes, working day, resources) and its potential to address existing school needs.

They were enthusiastic from the start though they had some questions which they felt were addressed either through response to above discussions or through implementation itself:

- How much resources and teaching time it would take up?
- Would it have additional effects to existing good behaviour policies?
- What children would it work for?
- Would it work for all children regardless of their abilities?
- What teachers needed to be trained and did all teachers in the school need to be trained?

### Implementation

- Principals considered the training to be effective and comprehensive, brief (2 days) and all of the principals considered the programme well worth the effort of releasing teachers.
- The fact that follow-up support (mentor system) was provided was valued and considered to be quite unique to the programme.
- The programme compared favourably with training for other in-service programmes, the fact that it came 'with everything' was really important.
- Principals were surprised that staff were so enthused about PAX and that this was sustained over time.
- The programme was easy to adopt, both teachers and children took to it readily in the main and it began to show results quite quickly.

### Principals' perspective on experience of delivery

- The fit of the programme with school policy and practice was accommodated by its pragmatic nature – it can stand alone, fit into the school day, happens while the work is getting done and there are no extras needed either for the game itself or for the reward to follow.
- During classroom visits, the principals noticed that the children were concentrating more and mentioned the link between concentration and less bad behaviour.
- The group involvement encouraged responsibility among children not just for oneself but for the group as a whole. It also fostered a sense of responsibility and relationship-building in children, while also acting as an incentive to behave well.
- The predictability was good for the children – beginning and an end, reward and when they would get it. The nature of the rewards was appreciated by the principals also, partly because they didn't require further resources and partly because the children enjoyed them so much. This was also one of the differences principals highlighted to other programmes.
- The only major issue arising related to replacement teachers, e.g. when class teacher was absent and also when student teachers were on placement.
- The programme elements mentioned most often by principals were mostly the visible ones, the harmonica, the 'tootles' and rewards.

## Support

The provision of support by the PAX mentor system was considered by principals as unique to this type of programme where the focus was on all the children as opposed to specific child populations. The content and frequency of support provided was considered sufficient, popular with both teachers and children – and provided affirmation and reassurance for teachers.

Some individual teachers might require more intensive support, possibly an ongoing support system for established PAX GBG trained teachers, this was linked to request for ‘refresher training’ (see Training section).

## Comparison with other programmes

- All five principals felt that PAX GBG had an advantage over other programmes they had used. It was viewed as simple and seemed to generate more enthusiasm amongst teachers. The continuity and consistency of it being delivered by the class teacher rather than a ‘specially trained’ visiting teacher was valued, as was the focus is on the group and the whole class is involved.
- There was a perception of less danger of the ‘novelty’ wearing off with PAX GBG.
- It is feasible to continue other programmes alongside PAX GBG.
- One of the big differences with PAX GBG, as stated by principals, was the fact that the rewards did not cost anything to produce and they happened within the school day. These elements were regarded highly and made managing the programme very easy.

## Impact on the School Principal

General comment indicated that there were less management issues, and the principal’s job was easier because the teachers found the programme helpful.

- There was evidence from all principals that when the programme was in operation behavioural issues significantly improved.
- Less referral to principal or less detention for behaviour issues was explicitly commented on by four of the principals and attributed to behaviour issues being alleviated through PAX GBG.
- The teachers found the programme a help in dealing with behaviour issues and were less likely to pass them up the line when they did occur.
- This had a resulting positive impact on communication with parents and a visible positive effect on the demeanour of some parents when they came to the school and were not expecting ‘bad’ news was noted.
- There was a positive improvement in atmosphere in the school because poor behaviours were happening less and the children were more able to regulate themselves.
- Relationships had improved within the classroom.
- There were fewer issues arising in the schoolyard as well; the instant response to the PAX sign and to the harmonica contributed enormously.

## Spread

The principals referred to the fact that teachers had used PAX GBG with the children in the school yard and beyond as evidence that it could spread beyond the classroom. For the principals, the enduring effects of PAX GBG were evidenced by the fact that the programme works, the teachers were continuing to use it, the children were continuing to engage with it and they wanted to have more teachers trained in it.

## Would the principals recommend the programme?

All five principals stated that they would recommend the programme to other principals and all of them wanted to have more of their staff trained up.

## Advice for PAX GBG scale up

Most of the comments in this section relate to communication and dissemination of information. It was notable that there were no requests for alterations to the programme itself or its delivery methods. None of these principals had heard of PAX GBG before contact was made, except for one who heard about it through teachers who had already delivered it. They felt that it needed to be promoted much more widely and that meetings like the promotion meeting used in this instance were essential for generating enthusiasm. For one principal, her initial scepticism remained until she attended this meeting even though she had spoken personally with PAX GBG management, so communication is key.

For those who are reluctant to engage in 'another' programme it is crucial to ensure they understand the acceptability of the programme, how well it fits into the working day, the almost immediate effects and the fact that no extra resources are required once it's up and running.

Principals articulated that there is a need to get conversation going around PAX GBG, other principals and teachers will have heard of other programmes but they will know much less, if anything, about this. They felt that advertising is well worth the investment and also advocated harnessing the support of the Board of Management of schools.

## Quotes from Teacher Survey

### Colleague recommendation

"I saw the positive influence it had on other classes with the teachers trained in PAX. I was interested in the influence it would have on my current class."

### Learning behaviour management/classroom management

"I trained because I found I was losing my voice from repeating instructions many many times and then having to shout at a few children. I was exhausted from the repeated misbehaviour."

"Tired of the constant negativity and nagging to get the children to listen and engage."

### Unsure of pupil buy-in

"Yes as I thought the boys would think they were "too cool" for the games and wacky prizes."

### Workload concern

"Yes. I thought it would be time consuming."

"Worried it was just another new initiative and would mean more work for me without results."

### Playing the 'game'

"Wow....a renewal of enthusiasm for my teaching. All I can say is positive. From the very first day all students were "hooked" and still remain so. The games worked flawlessly into my day causing my day to flow so easily as I did not need to be labouring good behaviour just "I see a spleem" and move on. The children self-regulated and I got on with my task at hand. The prizes are so simple, and don't cost time or money!!!"

“The atmosphere is much more positive as well as my approach to correcting behaviour...The work carried out during PAX game is of a high standard. The transitions are still busy but I am really happy that during games I have full attention. The children are displaying greater self-control and seem to really enjoy being rewarded regularly.”

### **Mentor**

“The mentor visits were stress-free with the focus always being on support for the next stage of implementation. They were also motivating as a teacher in the beginning to keep your ‘finger on the pulse’ and get different aspects of PAX covered.”

### **Child self-regulation**

“Calmer environment, easier to resolve any behavioural issues as the boys will now more freely admit that a behaviour was inappropriate, a lot more work being done.”

“The self-regulation and personal responsibility for own actions that evolves within the children is great.”

### **Ability to deal with disappointment**

“It is definitely a self-motivating game and the children rarely lost. When they did however, they were able to deal with the disappointment and much to my surprise, I have yet to see any tantrums over lost games!”

### **Improved behaviour**

“We have so much fun and all the while incidences of misbehaviours have been reduced and standardised test scores have increased!”

“Spleems have reduced dramatically since the beginning of the year and once the word PAX is mentioned children react very positively... It has had a huge impact on both my teaching and on my class’s behaviour! It has such a positive effect on the mood and behaviour of the class.”

### **Focus and concentration**

“Yes definitely, the children are so focused during the PAX games. When doing written work, it is so quiet, you can hear their pencils on the paper. It helps the more energetic children focus on doing their best work.”

“It has had a great impact on concentration in my class. Children can work for up to fifteen minutes practically silently and concentrate on the work at hand. This is quite an achievement for four and five year olds... There is a great sense of working together in my classroom and less of a struggle. There is much more teaching time in my classroom as a result.”

“Great for focus and behaviour, sometimes easy to forget on a busy day but helps day to be more productive.”

“Both myself and the children have seen a huge improvement in our class both from a behaviour aspect as well as a general well-being aspect. I don’t find myself correcting certain children half as much anymore, one blow of the harmonica and everyone and everything stops. It’s amazing!”

### **More Learning**

“My classroom has definitely changed for the better. My class were a particularly chatty class and yet there has only been one occasion where one group missed a prize since implementing PAX. It has taught me that children are well able to monitor and self-correct their behaviour when given an

appropriate reward. More work is getting done and the standard of work is improving. The children are also learning to solve problems on yard for themselves and talk to each other in a more sensitive manner.”

“We get more done and it’s very systematic. It works!!! I’m happier, the children are happier and they have matured so much.”

### Improvements in relationships

“It has strengthened the teacher student relationship also as they see you joining in the games.”

### Impact on the classroom

“Anxious children were happier and less anxious. The quiet time during the game was much needed by all – children became much calmer.”

“Children are much happier, content, positive and diligent. They are more motivated and encouraging towards each other. We get much more work done and more time for Granny’s Wacky Prizes and treats!”

### Impact on Teacher

“It definitely had a huge impact on me. As I said earlier, I was struggling with the behaviour of this group, which after so many years’ experience was very unnerving and scary. I had no wish to shout at or shame children, yet that was what I found myself resorting to because of the stress. What I saw it as, was the practical implementation of all the best practice psychology that I have learned over the years. It is the ‘HOW-TO’ of giving positive behaviour attention and gives you the means of ignoring the negative. It also acknowledges the need for movement breaks for children and these are done in such a fun way. From the children’s point of view, they loved it and asked for it to be played regularly. For at least one child it entirely transformed the way he sought attention.”

### More teaching

“Huge impact, the classroom became a nicer place to be. Less stress overall, less giving out, less repeating myself, more time to work individually with weaker children without interruptions and improved relationship between the children.”

## Quotes from Principals Interviews

### Detention/Less referral to Principal

detention ... “it would be a rare day when you wouldn’t have eight to ten who were in detention, and I would say we haven’t had ten in the whole year who have had to do detention, this year ...that is unbelievable. I mean, we had shared it between all of the teachers ... would supervise the detention at lunchtime, and we changed it this year to just the deputy and myself who would do it. And I’m not joking you, I’d say I haven’t had five days this year when I had to supervise anybody for detention. And if I did, it was one person or two. We’d never had any more than two on it, on detention. I mean it has really, really worked in our school.”

“The impact with regard to parents, as well, they would have been receiving less complaints home ... relationships have improved as well, within the classroom concerned; there are fewer issues in the yard as well. It’s just great.”

“Managements issues not the same, some easier, definitely less coming my way.”

“Less negative communication with the parents.”

“it makes for more friendly relations between parents and principal. Because you are not having to keep on saying your child is doing.”

### Positive communication with parents

“I haven’t got direct feedback from parents, but I do know that parents are walking into the school to those classes, with a greater confidence because they are not apprehensive about receiving a complaint. I’m only talking about the couple of parents that would be in that situation, they are able to walk in the door quite happy, at their peace that nothing is going to be wrong.”

### Impact on teachers – Principals perspective

“Other teachers are also very happy because ... in one of the classes where they (children) would have caused quite a lot of disturbance in the school and it impacted on other teachers as well, when they had to take the children into their class for instance, and that hasn’t happened since the programme has been engaged.”

### Would the principals recommend the programme?

“I’d like people to know that it works, that it’s not difficult, that it’s very teacher friendly, very child friendly, all those things are important, for schools to get involved in something.”

### Advice for PAX GBG scale up

“It really is a fantastic programme and it’s just such a pity that the department of education can’t see that this is just as important, or even more important in fact than what they give you these days for curricular study because if we don’t have the environment in which children are able and happy to learn, then the curricular aspects count for very little.”

**Find out more:** for further information and to access the reports, please visit: [www.paxireland.ie](http://www.paxireland.ie)

**Researchers:** Our thanks to the researchers – Professor Mark Morgan, Dr Margaret O’ Donnell and Mary Hegarty for their evaluation reports which will inform and guide the next phase of furthering the PAX GBG programme in Irish schools.

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**Midlands Area  
Partnership**

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## The Area Based Childhood Programme 2013-2016

