

*The Development of an App, to help children
with the transitional process from Primary to
Post-Primary School*

Capstone project

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Abstract

Having personally found the transition from Primary to Post-Primary School particularly challenging, I have always had a keen interest in the matter.

This project looks at the possibility of using an app to help ease the transition process for children from Primary to Post-Primary School. Having completed extensive research and engaging with teachers themselves, I then created an app. Once I had the app created, I distributed it among teachers, examined their feedback and made changes accordingly. The general consensus was that the use of an app could indeed help the transition process. The teachers generally believed that the app would be beneficial and useful to children commencing Year 8.

Overall, whilst I strongly believe that the app can be a success, I must acknowledge that it is a tool that should be incorporated alongside other transitional protocols, and not seen purely as a substitution. The main concern relating to the app is the platform on which it is accessed on. However, this is a problem which I feel can be overcome with the increasing use of iPads in Schools within Northern Ireland.

Finally, I must declare that this is a very small research project and there have been many constraints including time and money which have limited my findings. Further research carried out with Year 8 children would enhance the accuracy of my results.

Acknowledgements

I would like to first of all express my sincere appreciation and thanks to my tutor Mr Gerry Trainor for his dedicated time, constant guidance and support throughout the completion of this project.

Secondly, I would like to thank all of the teachers who took the time and effort to complete my questionnaire. Their responses were invaluable in the gathering of my research. In particular, I would like to thank the five teachers who gave up their time, agreeing to partake in my interviews. Their opinions and suggestions allowed me to produce an app to the highest possible quality. This was all very much appreciated.

Finally, I would like to thank my parents, Peter and Ann Kerr, and my wider family, for their constant support and guidance, not just for this project, but for the duration of my academic journey thus far. Without their care and backing, I would not have been in a position to undertake this project.

1 Chapter One – Introduction

Having first-hand experience with the transition process from Primary to Post-Primary School, I know just how challenging it can be. Coming at a time when there are a lot of changes in a child's life, the issue has always proved problematic. Not only do children face a change of teachers and environments, they also have to adapt to different cultures, rules and regulations. In the first days of starting school, children are bombarded with lots of new information in these areas, which can be very daunting.

Studying and continually working in the area of ICT for the past seven years, I appreciate how technology can provide many benefits within education, if used correctly. With a great interest in the area, I aimed to find out if the use of an app could help with the transition process for Year 8 children.

In order to achieve this, I had to consider several aspects. I began by carrying out extensive research, looking at the actual problems that cause the transition to be a difficult time for children. I then explored both the benefits and problems associated with apps, in order to avoid a biased approach, before finally examining additional ways to aid the transition process.

Following this, using Microsoft Forms, I generated a questionnaire. The questionnaire was split up into three main categories; teacher background, views on the transition process and opinions on apps. As well as voicing their opinions, teachers also had the opportunity to share what they felt needed to be included in the app.

Having analysed the questionnaire results, I carefully planned out my app, before sampling different software packages to create the app. I finally decided to use Microsoft PowerApps. Despite creating apps in the past using alternative software, this package was totally new to me and so I had to learn the basic skills of the program, a lot of time was invested in achieving this. I was eventually able to grasp it and went on to complete the app.

Having created the app, I interviewed five teachers, seeking their feedback. From analysing the interviews, I was then able to distinguish common trends and opinions and act on them accordingly. This resulted in editing, including and omitting content from my app.

In Chapter Two, I carried out research surrounding the area of transition and the use of apps. In Chapter Three, I looked at the design of my app as well as identifying my methods of research and constraints faced. In Chapter Four, I carried out an analysis of my results from both my questionnaire

and my interviews. Finally, in Chapter Five, I concluded the project, stating what I have learned and how the process went overall.

2 Chapter Two – Literature Review

2.1 Problems children face in the transition from Primary to Post-Primary School

For many children, secondary school represents a step towards autonomy and the whole process of growing up and leaving childhood behind. It can be overwhelming for children and parents alike (Elliott, n.d. cited in Sexton, 2015).

As Elliot implies, moving to Post-Primary School can be quite overwhelming for children. At this time, not only are children facing a change in environment, but they are also entering puberty, which involves dramatic changes in social and cognitive demands as well (Cohen-Gilbert and Thomas, 2013). There are numerous factors contributing to this tough time, some of which I will look closely at below.

2.1.1 School Size

Viewed as one of the five most important life stage transitions faced by people, the transition from Primary to Post-Primary School can be seen as stumbling block for many young children (The World Bank, 2007:69). In some instances, children can be moving to a new school that is ten times larger than their Primary School (Kozma, 2010). Therefore, it is no surprise that getting lost is one of the most commonly cited problems (Brewin and Statham, 2011:373). It is important to remember, that this is a problem that can arise for all children, regardless of how a child is coping with other issues such as forming new relationships.

2.1.2 Relationships

As Malone (2016) confirms, losing a friend due to a school change is out of the control of an adolescent. Moving school can be especially difficult for children as they not only lose their relationships with teachers and friendships, but they then have to start the rebuild process over again.

2.1.2.1 Teachers

Whilst children can be very excited about the transition, it can turn out to be a very difficult time (Tassoni et al, 2007). Fullarton (1996, cited in Konstantinos and Triandafillos, 2008:160) claims that children view furthering their education in Post-Primary School like a New Year's resolution – it has lots of good intentions but often fails to materialise. One contributing factor to this perception is arguably to do with the new batch of teachers that children have to work with. In addition to the large-scale increase in school size, children will also face an increase in the number of teachers – possibly meeting up to nine or ten teachers daily (Steady and Roberts 2013, cited in Deacy, Jennings and O'Halloran, 2015). These teachers will likely be less supportive than their Primary School teachers, due

to the less frequent contact and the increased number of pupils that each teacher is involved with, which is unfortunate, as this is a time where they most need the support (Midgley et al 1989, cited in Howe and Richards, 2011:89).

This teacher increase also leads to additional transition difficulties, in that, not only do the children have to learn several new names, but also, the personalities and expectations associated with each teacher. Having more than likely only worked with one or two teachers per year in Primary School, this change can be difficult to grasp.

2.1.2.2 New Peers

As well as having to adapt to a larger, more challenging school setting, with the different academic structures and expectations, children face changes in social interactions not only with teachers, but also, with new peers (Anderson et al, 2000). Primary School friendships can be lost which is something that was a major source of concern for pupils across the course of the 'Identifying factors that predict successful and difficult transitions to Post-Primary School' study (Rice et al, 2015:5)

2.1.2.3 Bullying

The majority of Primary School children will have worries about Post-Primary School, but according to Suckling (2002), bullying is adolescents' biggest fear. With 1.5 million young people having been bullied within the past year in the UK alone, their fears are understandable (Ditch the Label, 2016). These fears can contribute to increased stress and anxiety. Discussing this with teachers in person can be extremely challenging. Possibly communicating via an app/email could be much easier.

2.1.3 Timetable

With numerous teachers, children now have to manipulate a timetable, more than likely for the first time. This is another factor that almost all pupils express a concern about prior to the transition (Qualter et al, 2007). Starting Post-Primary School, children can suffer from information overload, as they need to hear lots of information for the first time. Perhaps having a facility on an app to display their timetable would help in overcoming that barrier.

2.1.4 Who is most affected?

It is well documented that children with Special Educational Needs (SEN) can find the transition period more challenging than some of their peers (Lerner and Kline, 2006). Children with SEN can be defined as

A child or young person has SEN if they have a learning difficulty or disability which calls for special educational provision to be made for him or her”(Department for Education, 2015:15)

The transition period can be very challenging, particularly to those children with Autism (ASD). Steady and Roberts (2013, cited in Deacy, Jennings and O'Halloran, 2015) believe that the actual transition period itself may cause increased anxiety to a child, due to the change in their normal routine. Despite this, Weale (2017a) argues that moderate levels of anxiety can be linked with greater academic success. This success however, coming at the later stage of the Post-Primary journey, and if a child is unable to get past the initial barrier of transition, then it is unlikely that the anxiety will help in later years with academic success. In a separate report, Weale (2017b) highlights that Primary School children are facing increased stress and anxiety around exam time, which has caused sleeplessness, panic attacks and in some cases, hair loss. The transition period will surely only add to this discomfort. As Maras and Aveling (2006) confer, children with ASD find it difficult to cope with any sort of small changes to their routines; therefore, it is understandable how such a major change, in moving school, can prove extremely challenging.

Deacy, Jennings and O'Halloran (2015:295) illustrate in the table below, that children with autism face numerous challenges in transition, with the new environment being the largest problem. This can be related back to the fact that some Post-Primary Schools can be up to ten times larger than the Primary Schools which children attended.

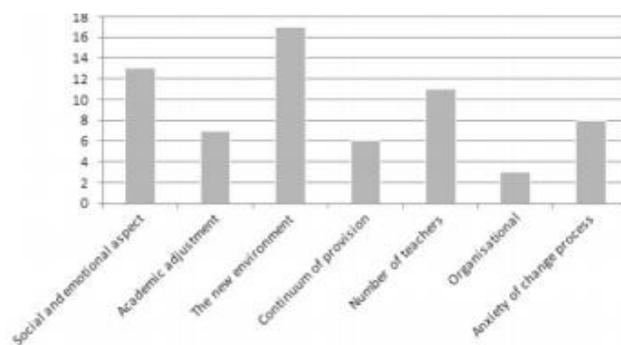


Figure 1. Challenges facing students with ASD in transition

In general, children with ASD are at a greater risk of having a negative transition experience, in comparison to their peers (Hannah and Topping, 2012).

However, as visual supports can help communicate with people on the autistic spectrum, (The National Autistic Society, 2017) I believe, that with the correct visual timetable in an app, along with a school map, the device could help autistic children settle in a way that would be superior to traditional hard copies.

2.1.5 Summary

Overall, these problems can produce barriers to learning across a range of subject areas, (Graham et al 2016:682) as many authors; including Coad and Jones (1999), believe that the roots of later

problems can be found in the transition period. The transition period is most definitely the foundations of a child's Post-Primary School days, so positive experiences are crucial.

2.2 Apps, Tablets and Smartphones – in schools

With continual advancements in technology, numerous schools in Northern Ireland are beginning to use iPads in the classroom (Fawcett, 2016). In terms of figures, 68% of Primary and 69% of Post-Primary Schools in the UK are using tablets; with 9% of these schools' children having their own individual device. This trend is highlighted by the fact that 45% of schools declaring that they will soon be introducing them (Family Kids and Youth, 2014).

Traditional schools, who used to ban iPads, are now embracing change and encourage the use of tablets, both in school and when at home, to complete homework (Fawcett, 2016).

2.2.1 Benefits of Apps

Like everything else, there are both benefits and problems associated with apps in the classroom, which I have identified below.

2.2.1.1 Motivation

"Apps can help create a learning environment that keeps students motivated and engaged" (Apple, 2013). In a study on the use of portable tablets in school, individualisation of the task-solving process and motivation, were the two main advantages identified, in terms of tablets being used as tools in the education system.

As Taylor (2013) maintains, children learn best when they are engaged in their learning. Therefore, in this regard, using apps is certainly a beneficial way of learning, thus a reason as to why their usage in schools is rapidly increasing.

2.2.1.2 Children are using tablets

It is no secret that the amount of children using tablets is rapidly increasing. Carrington (2007, cited in Flewitt, Messer and Kucirkova, 2015) suggests, that for present day children, digital technologies are as 'unremarkable and ubiquitous' as electricity. Therefore, it makes sense for schools to bring the learning to the children, in an environment that they are engaged with. Moreover, if we are going to use apps to enhance our learning, why not also use them to help with the transition?

2.2.1.3 Shown to improve education

Despite the fact that people may have mixed views on the use of iPads and Apps in the classroom, there is a lot of research to indicate that they do in fact, enhance learning. A study - 'Mobile Devices in Early Learning' carried out by Stranmillis University College (2017), revealed that young peoples'

Communication, English and Maths improve as a result of using iPads regularly. A further study, carried out with 266 kindergarten children in Auburn, America, also showed that every child who used an iPad, scored better in all literacy tests (Schramm, 2012).

Further up the educational ladder, 75% of students surveyed in Oklahoma State University, believed that using iPads enhanced their learning experience (Singh, 2011). Moreover, 104 medical students at the University of California, that completed the 'Irvine's iMedEd program' scored an average of 23% higher on examinations using iPads, in comparison to previous classes which did not use iPads (Comstock, 2013).

Granted that the above results do not directly involve children at the transition age, they do however, illustrate that children from pre-school, right up to University, are using iPads/Apps worldwide, and are reaping the rewards.

With this in mind, along with the knowledge that iPads are quickly becoming more common across schools in Northern Ireland, when a child comes to the transition age, they will be comfortable and familiar with such technologies, and thus, increasing the likelihood of the transition app being successful.

2.2.2 Problems with Apps

As mentioned, despite the listed benefits of apps, there are also drawbacks that need to be considered, which I have listed below.

2.2.2.1 An Expensive mistake

According to the US State of Maine, there is little academic research to suggest that tablets are any better at improving children's results', than alternative options, such as laptops (Smith, 2016). So, have we all just been listening to what we want to hear and neglecting the finer details? If iPads are no more beneficial than laptops, then why are we choosing them? In a class of thirty children, it takes £10,500 for them each to have an iPad (Smith, 2016), and yet, there are doubts that they are in fact, better than other alternative, cheaper options.

In fact, it could be argued that the days of tablets in the classroom are coming to an end, for this very reason. Following a poll, teachers and children overwhelmingly voted in favour of laptops over iPads (Smith, 2016). As a result, The Main Department of Education (USA) and Apple are offering a "refresh" swap deal - trading iPads for laptops at no additional cost (Washuk and Writer, 2016). Could this be the start of a global craze? If so, then there would be little point in creating an app to aid transition, if we have no platform to access it.

2.2.2.2 Tablets are misused in the classroom

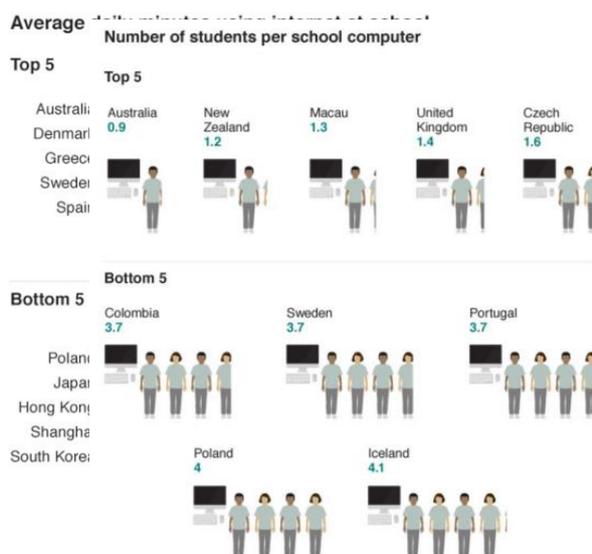
With all the advanced features and facilities on today's tablets, there are serious concerns that they may be a distraction to our children. Karsenti (2013, cited in Oliveira, 2013) clarifies that a student survey revealed one third of students admitted to playing games on iPads in school, and an astonishing 99% of students said they found the gadgets distracting.

2.2.2.3 Computers, Tablets, Smartphones – No such devices improve pupil scores

Despite the fact that Smith (2016) argues laptops are more beneficial than iPads, there are some views that laptops themselves do not improve academic scores. Schleicher (2015, cited in Coughlan, 2015) argues that the more successful education systems in the world are very cautious in introducing technology into the classroom, as children using tablets very often tend to score lower than children who use them moderately.

The graphs below illustrate that top educational performing countries, such as Poland, are spending approximately ten minutes on the internet per day, compared to lower performing countries, such as Australia, who spend approximately one hour per day (Coughlan, 2015). Likewise, in terms of the number of children per computer, Australia actually has more computers than children, whereas Poland has only one computer per four children.

If this is the case, then similarly to the 'expensive mistake' issue, there would obviously be little point in proceeding with the creation on an app.



2.3 Additional ways to aid the transition

Obviously the creation of an app to help the transition is only one method that could possibly help. There are many other methods that schools can avail of, some of which are discussed below.

2.3.1 Making contact with the Post-Primary Schools

Primary Schools linking up with Post-Primary Schools can prove to be a very successful way in helping children to settle. An assistant head teacher, Vicky Horne (2015), tells how her Post-Primary School invite final year Primary School children to visit in the last week of each term for lessons and activities, as well as bringing ex-pupils back to school, to talk with the children who are ready to start the transition.

2.3.2 Encourage children to join clubs and teams

Extra-curricular activities allow children to meet new people and make new friends. The more friends and faces children recognise in school, the easier the transition will be for them. Less stressful transitions will mean children can settle into their new community quicker.

It also allows them to develop their non-academic skills, and can ensure they become a more rounded individual. More than likely, they will join clubs similar to those which they are involved in, outside of school. Therefore, they can showcase their skills and improve their self-esteem simultaneously.

2.3.3 Buddy System

From my own personal experience, I have both benefited from, and seen the benefit of being a 'buddy' to children entering school in first year. The 'buddy' system involves a final year student linking up with a new first year class in the school. The 'buddy' acts as a link between the children and their teachers. It can be easier for a child to express their concerns or worries with a 'buddy', rather than a teacher, as they may feel more comfortable confiding in another pupil.

2.3.4 Summary

The above methods can all be very effective measures to help aid the transition period. With this in mind, I feel I could incorporate these methods along with my app, so rather than each method being viewed as an alternative to the device, they could complement one another. Integrating the app with the above alternatives and others, could prove to be a very successful strategy in helping children to settle in.

2.4 Research Questions

Before commencing my methodology, it was important to identify my main research questions for both my questionnaire and interviews.

2.4.1 Questionnaire

Before creating my questionnaire, I had to first of all know exactly what I wanted to discover from it. Therefore, when planning it, I was able to split my questions up into four main areas as show below.

A	B	C	D
Teacher Background	Views on the Transition	Views on Apps	Would a Transition App help?
<i>What is your gender?</i>	<i>Do you think the transition period is challenging for children?</i>	<i>Do you think Year 8 pupils would be familiar with apps?</i>	<i>Do you think an app would help with information overload?</i>
<i>How long have you been teaching?</i>	<i>Do you think Year 8 pupils suffer from information overload?</i>	<i>To what extent does your school promote apps?</i>	<i>What content would you like to see included if an app was created?</i>
<i>What is your main subject?</i>	<i>What does your school do to assist the children?</i>		<i>How appealing do you think an app would be to Year 8 children?</i>
	<i>Are they adequate? / What else could be done?</i>		<i>Do you think an app would be beneficial to children in transition?</i>

2.4.2 Interviews

Likewise with my interviews, in the planning stage, I was able to categorise my questions into four areas, in the following way.

A	B	C	D
App Strengths	Areas for development	Children using the app	Where the app would be accessed
<i>What did you like about the app?</i>	<i>What areas of the app do feel could be improved?</i>	<i>Do you think it would help children during the transition?</i>	<i>Do you think the app would be used more in school/ At home/ Both?</i>
	<i>What would your concerns about the app be?</i>	<i>Do you think children would enjoy using it?</i>	

3 Chapter Three – Methodology

3.1 Research Methodology

In order to optimise my app, I worked closely alongside teachers throughout. To initially gain an insight into teachers' current views on apps in the classroom, I created a questionnaire on Microsoft Forms, which was completed by thirty teachers. This also provided me with suggestions as to what content to include. Once I had created my app, I afforded teachers the opportunity to trial it, before seeking their feedback. Their views were gathered in the form of semi-structured interviews. From analysing their answers, I was able to identify areas of improvement for the app and act upon them accordingly.

3.1.1 Qualitative Research

As Kvale (1996:11) maintains:

The subject matter of qualitative research is not objective data to be quantified, but meaningful relations to be interpreted.

Qualitative research is said to provide us with more truthful, accurate and objective insights in comparison to some alternative research methods (Brennan, 2017). With qualitative research generally conducted in a face-to-face environment, it can be argued that its accuracy is enhanced due to factors such as body language, facial expressions and tone of voice all being observed, something which is not always the case in other research methods.

For the purpose of this project, I carried out some qualitative research in the form of interviews, as previously mentioned. I ensured that the interviews were semi-structured, as this gave participants an opportunity to elaborate on questions and develop their answers.

3.1.2 Quantitative Research

McLeod (2017) has the opinion that:

Quantitative research gathers data in numerical form which can be put into categories, or in rank order, or measured in units of measurement. This type of data can be used to construct graphs and tables of raw data.

With quantitative research involving a larger number of people, it can be argued that the results will be seen as generalisable. In addition, with software packages such as Microsoft Excel, displaying the results can be made easy, meaning it is more likely that the analysis is reliable (HH, 2016). In this case, I was able to take advantage of both Excel's and Microsoft Form's facilities to present the data.

Despite the fact that we can distinguish the difference in the two methods, Creswell (2005) argues that, in reality, rarely are qualitative and quantitative research solely qualitative and quantitative.

As previously alluded to, I used quantitative research in the form of questionnaires, which I created on Microsoft Forms. This package appealed to me more so than alternative packages, mainly due to the fact that it's presented in a more superior manner. In order to attain the results, I first of all sent emails to teachers from my previous school placements, seeking their participation acceptance. From there, I then sent them the link to the questionnaire itself, which they were able to anonymously complete, with their results recorded automatically. Following this, I analysed and presented the results in the form of numerical figures and percentages, with the inclusion of graphs and charts.

3.1.3 Ethical Considerations

The value of research depends as much on its ethical veracity as on the novelty of its discoveries
(Walliman, 2006:147)

For the purpose of this project I had to take into consideration numerous ethical issues. Firstly, as mentioned, I began by seeking their acceptance of participation. I ensured all questionnaire respondents and interviewees remained anonymous, whilst feeling both at ease and comfortable. Moreover, I ensured that all information gathered was solely used for the purpose of this project and that the recorded interviews were deleted once they had been typed up.

Finally, I had to ensure that I asked fair, neutral and non-biased questions, so that the participants did not feel pressured into responding to a question in a certain way.

3.2 Constraints

Throughout my project, I was faced with a few constraints, which was not ideal, but I was able to work around them as best as possible.

3.2.1 Financial Constraints

Obviously as a student completing this project, I was not in a position to access expensive software that would have, perhaps, helped to fully develop my app. However, I was happy to use Microsoft PowerApps, a free software package that I felt had the most appropriate features that my app required, particularly with the email facility, which is a key element of my app, as well as its availability on iOS and Android. Further packages that I had observed were appealing, but all proved quite expensive and as mentioned, with no budget to work with, they proved to be non-viable.

3.2.2 Lack of Experience

Before deciding to use Microsoft PowerApps, I had trailed different software packages including 'AppShed' – an app that I had previous experience with and one which I am comfortable using. However, I felt, for the nature of my app, it was not suitable, due to its simplicity. Over the duration of this project, I wanted to gain experience and learn new skills, and so, by using Microsoft PowerApps, I was able to achieve this. Having initially browsed at the package, it was clear that it is more advanced than 'AppShed'. Moreover, it took a long period of time to learn these skills and at times it proved quite frustrating, but I am glad that I am now in a position to have the skills to use both software packages.

3.2.3 Time

Ideally I would have wanted to trial the app with children during the time of the transition. This would have involved the children first accessing the app towards the end of their Primary School journey, and allowing them to trial it right through to the end of their first year in the Post-Primary School. Though, due to the nature of this project, time did not allow for it. This is however, something that I would be keen on trialling, perhaps next year.

3.3 Specification

3.3.1 Aim

My aim was to create an app which could help aid children with the transition from Primary to Post-Primary School. I wanted all relevant information to be stored in the one area, as well as having a facility that allowed for communication between children and teachers to be made easier.

With the recent advancements in technology, more and more children now have access to apps via their smartphones and tablets. With this in mind, I felt that, pitching this resource in an area that the children are already involved in was a sensible choice.

Despite the fact that schools currently implement different strategies to help children with the transition period, it is still proving quite problematic.

Numerous schools have begun to create their own apps. With this in mind I believed that, the creation of an app, focussing primarily on the transition period for incoming Year 8 pupils, could assist with the current strategies. Together, these strategies could help the children overcome their difficulties.

Within the app, I planned to create facilities for the children to: record their timetable, log their homework and access school documents such as policies, school maps etc. Despite the fact that children already have access to this information in school, it is generally presented to them as a hard

copy. I feel that an electronic copy could prove more popular, not just for the fact that children are prone to losing belongings, but also, because of how children are now so heavily involved in technology. The presentation of this information on an app rather than a website would also be more beneficial. DeMurs (2016), an online marketer for business owners, reinforced this point, claiming that apps are taking over from websites, mainly due to their ease of accessibility, readability and interactivity.

3.3.2 Creating the App

In order to create the app, I had to first brainstorm all of its layout and features. Along with the information I received back from my questionnaires, I jotted down all my ideas on pen and paper. Having analysed both pieces of information, I settled on a final design, including the following content.

3.3.3 Content

Within the app, I identified the following key areas that needed included:

- Timetable
- Teacher List
- School Map
- School News
- Email Facility
- School Calendar
- Bus Timetables
- Homework Diary

3.3.3.1 Timetable

Children are prone to forgetting and losing possessions. With this in mind, I decided to incorporate a digital timetable in my app. I ensured the timetable was colour coded to ensure that it was more user-friendly. Of course, there is a chance that children could also lose their phone, but I feel that they would take more care with digital technologies over paper-based documentation.

3.3.3.2 Teacher List and Email facility

As highlighted in my literature review, learning various new teachers' names can be difficult, as can expressing any concerns to a new teacher, whom a child may not initially feel totally comfortable with. Therefore, having the list of teacher's names and their email address on the app, allows for direct communication to be a lot easier for children to share their worries. Again, the ease of access via the app could see an increased usage of the facility, which, from my own experiences is a facility that remained dormant throughout Post-Primary School.

3.3.3.3 Map

Like the timetable, having an electronic copy of a school map is essential for pupils during the initial transition phase. From personal experience, I know that getting lost in the 'big school' can be a very lonely and daunting place. Having previously raised the issue of mobile phone usage in school, and with children always having an iPad in their possession possibly being unrealistic, it could be argued how effective it could prove. However, I believe that the facility could be accessed outside of school, meaning the children have an idea of the school layout before entering.

3.3.3.4 Homework Diary

Receiving homework from numerous teachers can be hard to remember when not recorded properly. Granted that several schools provide hard copies of homework diaries, which can be effective, I still feel recording a soft copy of the homework could complement this method and together ease the problem.

3.3.3.5 Bus Timetables and School News

Information on bus timetables and advice on what to do if you miss the bus is something I feel can put children at ease. A facility to show the schools twitter feed, sharing school news on the app helps keep the children up to speed on events.

4 Chapter Four – Results

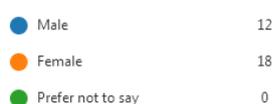
4.1 Questionnaire Results

4.1.1 Teacher’s Background

Thirty teachers completed my questionnaire, including twelve males and eighteen females, which gave a good balance.

1. What is your gender?

[More Details](#)



Out of the thirty teachers, there were twelve that had been teaching between 0-5 years, five that had been teaching 6-10 years, five that had been teaching 11-15 years, three that had been teaching 16-20 years and five that had been teaching 21+ years. This pleased me as it allowed me to gather views from a range of teaching backgrounds. The older teachers perhaps have had less experience working with apps, whereas the younger teachers arguably could be more heavily involved with them.

2. How long have you been teaching?

[More Details](#)



Their main subjects varied over sixteen different areas, which again gave me a good variety and an insight into the views from numerous subject areas within schools. I felt this was important as incoming Year 8 pupils will be undertaking the majority of these subjects.

Subject	Quantity
Agriculture	1
Art	1
Business Studies	3
Computer Science	2
General Primary	1
Geography	2
Home Economics	1
ICT	1
Irish	1
Languages and Special Needs	1
Mathematics	7
Music	3
PE	2
Religious Studies	2
Science	1
Technology	1

4.1.2 The Transition Period

In terms of the transition period itself, 90% of teachers agreed that it is challenging for children. All teachers confirmed that their schools currently implement strategies to try and smooth the transition. This result was as expected.

One dominant strategy was “working closely with Primary Schools”. This included; “serial days for P7’s”, “Parent Induction evenings – meeting tutors” and “P7’s being invited on Year 8 school trips”, which helped allow P7s gain a feel of the new

environment that they will be entering. The fact that it was such a popular answer proves that it is a strategy that works in helping incoming Year 8 pupils.

It also included “Year 8’s and staff visiting local Primary Schools”, allowing P7s to ask questions to both parties, especially the Year 8’s as they are only one year ahead and can understand the worries they too faced. In addition, “liaising with Primary School teachers over curriculum covered”, “P7 open nights” and “P7’s completing sample lessons prior to entry”, were additional methods mentioned.

One teacher commented how “action packed summer schemes” allowed P7 pupils to mix with current Year 8 students over the summer months, which, by ensuring there was no long layoff between finishing Primary School and beginning Post-Primary School, helped bridge the gap.

In terms of starting Post-Primary School, phased inductions are present whereby “Year 8’s begin a few days earlier to give them a feel of the school before the rest of the pupils begin”. Year 8 groups will also be assigned with “Year 14 buddies”. This is where a Year 14 pupil helps to care for the pupils and is in contact with them daily. It can in some cases, be easier for a Year 8 pupil to share their worries with their ‘buddy’ rather than their teacher.

“Bonding trips” was another method which helps children settle in and helps them to make new friends. However, despite all the benefits associated with this method, it neglects in-school factors such as manipulating a timetable and recording homework.

One teacher shared how “In the third week of September, we invite parents in to showcase the work their children have completed to date and it is displayed in the hall. This also allows parents to chat to staff about any worries they would like highlighted”.

When in school, “the strong promotion of extra-curricular activities” and “a variety of clubs and activities exclusive to Year 8” help; they can begin to express themselves in a non-academic environment and can meet more pupils in their year group.

Finally, as well as “an excellent pastoral care system being put in place”, “the beginning of term tending to focus more on the child than the content” helps ensure that children have the best possible opportunity to settle into their new school.

Despite the fact that 80% of the teachers believed their school’s measures to be adequate, 57% would like to see measures developed even further.

6. Do you feel that these measures are adequate?

[More Details](#)

Yes	24
No	3
Maybe	3



Whilst most respondents’ recommendations included methods mentioned above, some alternative

suggestions included “the use of the internet to aid transition” and the creation of “a school app”.

4.1.3 The current use of Apps

87% of the thirty teachers questioned agreed that the majority of pupils starting Year 8 would be familiar with apps. This strengthens my argument that by launching an app to help tackle

8. Would you agree that the majority of children commencing Year 8 would be familiar with Apps?

[More Details](#)

Yes	26
No	4



the transition issues, school’s would be targeting an environment that the children are, at present, involved in.

Despite this, out of a five star rating, the average response for Apps currently being promoted in the classroom was just 2.6. However, I see this more as an opportunity than a problem. I believe the innovative idea of an app, focussing solely of the transition, could prove very popular and so with its presence, this rating would most definitely rise.

9. To what extent does your school currently promote the use of Apps in the classroom via iPads/Tablets etc?

[More Details](#)

30 Responses

2.6 2.60 Average Rating

Regardless of the current low promotion of apps in the classroom, 77% of respondents agreed that Year 8 pupils suffer from

information overload, with a 4.4 out of 5 star rating suggesting

that if such information was stored on an app, it could be beneficial. Again, this stat was

reassuring, in that the creation of my

10. Do you feel that Year 8 pupils suffer from information overload in the transition period from Primary to Post-Primary?

[More Details](#)

Yes	23
No	7



11. If such information was stored on an app, how beneficial do you think it would be?

[More Details](#)

30 Responses



4.40 Average Rating

app could be a more efficient and effective way of communicating information with Year 8 children than current method of providing hard copies.

4.1.4 The creation of an app

In terms of creating an app, teachers gave their views as to what content they would like to see included. All thirty said they would like to see a timetable included, with twenty-nine also voting for the school calendar and map. Twenty-eight were in favour of a teacher list, whilst other suggestions included; after school activities, dinner menu, homework diary, policies, school news, school rules and photos of staff. From these results, I was then in a position to include additional content in the app, which previously I had not considered.

Out of a five star rating, 'How appealing do you think the creation of an app, to aid the transition from Primary to Post-Primary, would be to children?' scored 4.63 stars. This result was particularly encouraging as it coincides with my initial research, suggesting that children enjoy working with apps.

13. How appealing do you think the creation of an app, to aid the transition from Primary to Post-Primary would be to children?

[More Details](#)

30

Responses

4.63 4.63 Average Rating

Similarly, 'Overall, do you feel the creation of an App, to aid with the transition from Primary to Post-Primary, would be beneficial for children?' scored 4.57 stars. Again, this figure gave me confidence in that the notion to introduce a transition app would not only be appealing, but more importantly beneficial.

14. Overall, do you feel the creation of an App, to aid with the transition from Primary to Post-Primary, would be beneficial for children?

[More Details](#)

30

Responses



4.57 Average Rating

4.1.5 Further Views

Further comments included,

"Very good idea as it would be available 24/7 on their phones and it would be SEN friendly to those pupils who have anxiety in relation to disruption of structure e.g. autistic pupils".

"The appeal of the app would very much depend on its presentation and ease of use."

"I feel this would be a great idea and would be welcomed in our school."

"Unfortunately current education funding does not allow for ipads etc"

These comments have given me good feedback. They have not only proven that the idea is largely accepted as being beneficial, but have also provided me with potential issues that I must be aware of whilst creating the app.

4.2 Interviews

I carried out five interviews with Post-Primary school teachers, four working in the mainstream and one working in a Special Needs School. The tables below provide a summary to the responses provided by teacher regarding each question. I have used colour coding in order to illustrate times where similar trends that have been mentioned by numerous interviewees. E.g. In Question 1, four interviewees commented on the navigation of the app and so I have highlighted these yellow. Beneath each table, I have analysed the responses.

4.2.1 Question 1 – What do you like about the app?

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
<p>I think this app is very good.</p> <p>I like the whole layout of buttons, they're well-spaced out.</p> <p>The School design that you've got going on – it's a very professional look.</p> <p>The two pages means that the buttons aren't squashed together.</p>	<p>The school colours and logo.</p> <p>The school motto.</p> <p>The navigation is very easy throughout the app.</p> <p>Content -the school map, teacher list, bus timetable, uniform, policies, homework diary, link to social media, timetable. The layout, is nice and clear, easy to use, easy to navigate.</p>	<p>I really like the app.</p> <p>Appropriately timed. Extra content - homework diary and ease of contacting the teachers.</p> <p>Aesthetically pleasing.</p> <p>Very well laid out.</p> <p>School's colours.</p> <p>Working my way through the app was very easy, navigating both backwards and forwards was quite straightforward.</p>	<p>User-friendly as it is easy to navigate around and retrieve the information required.</p> <p>Up to date - information on the school without having to go look for it in a school website.</p> <p>Colour scheme.</p> <p>School quote at the top and school logo.</p> <p>Professional.</p> <p>The colour scheme is eye catching, personal to the school and the dark background with white writing makes the text on this app easy to read.</p>	<p>I really like the app actually.</p> <p>Colour Scheme – The consistent background and colours throughout make it quite professional.</p> <p>Connected – It's quite good the way the app has direct contact with both the school's website and twitter feed. It's a one stop shop sort of thing.</p> <p>The buttons all work well which makes navigation very easy</p>

All interviewees generally liked the app. The most popular aspects of the app were: the layout, the colour scheme (which generated a professional look), the navigation and the content. As Falloon (2013) indicates *“It is important not only to pay attention to mobile technology in general, but also to consider the design and content of Apps in order to clarify what instructional benefits the combination of mobile technology and Apps actually give”*. In this regard, I was very pleased with the feedback relating to the app’s appearance, content and navigation as with this in mind, I had spent a lot of time concentrating on these areas.

4.2.2 Question 2 - What part or parts of the app then do you think could be changed or altered?

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
Well, nothing would really stick out at me automatically. I couldn't think of anything right off the top of my head to be honest.	Push notifications - It would be quite good to get push notifications sent through.	Maybe the addition of a game would provide the children with an incentive to go on to the app.	Make the app more user-friendly for EAL pupils. This would enable them to navigate around the app more efficiently. Additionally I think that if there was a facility for parents to pay the school e.g. fees or for their child's school meals this would prevent children losing money or spending it on something they were not told too.	I wouldn't say there is much wrong with the content that is in the app. One recommendation perhaps I would share would be an interactive tour of the school. This is something we find works very well with our children in the special school, especially those with autism, which actually is 81% of our children.

I received some good advice for improving the app. Interviewee 2 suggested the use of push notification, which is something I have now researched and added to my app. Interviewee 3 suggested the inclusion of a game would help encourage students to use the app. Moreover, interviewee 5 made the recommendation of a virtual school tour. However, time constraints (spoken about in the methodology section) on this project have provided a barrier to their inclusion. Interviewee 4 suggested the inclusion of a pay point for parents, which I feel would prove an excellent addition for the app. However, as I am not actually able to fully trial the app, including this feature is unrealistic. Finally, interviewee 4 suggested the inclusion of icons would help ensure a more user-friendly app especially for EAL students. I agree with this point, but due to the fact that there are too many buttons, such as policies, that do not have distinctive icons, I would be unable to convert all text buttons to icons and I feel having a mixture would harm the consistency and overall professional look the app currently supports.

4.2.3 Question 3 - Do you think this app could help children during the transition period from Primary to Post-Primary School?

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
<p>Yes, most definitely there, if a first year just coming into first year, they're going to have a map.</p> <p>Content – Uniform, Timetable – don't have to worry about losing hard copy,</p> <p>Teachers list – makes communicating with</p>	<p>Yes, because there's of course children school that won't have the confidence to ask questions or ask an older student/teacher.</p> <p>Ease of access to contact teachers directly through email – confidential.</p> <p>Difficulty finding friends.</p> <p>If a child is being bullied, let's face it, they don't like</p>	<p>Yes, most definitely.</p> <p>Content - It has all the relevant information for the transition period included.</p> <p>Policies and that for parents, it's handy to have them on the app.</p> <p>I know most of our children in school don't ever be on their emails – it's a facility which is almost benign. The ability to contact teachers directly and</p>	<p>As a Year 8 form teacher I encounter with many different experiences of the transition period.</p> <p>Information Overload - This app would help prevent it by enabling pupils to access all the information required at the click of a button and it's more appealing than paper.</p> <p>Colour scheme - presents School as a friendly school.</p>	<p>Most definitely.</p> <p>In our case, in a special needs school, transition is a long and slow process. Our pupils love the interactive tour part of our app especially. The</p>

students easier and confidential, eliminating fear factor of confronting teachers.	to approach the teacher in the classroom. So, to facilitate this from home, by a quick email through the app, you know it gives them that platform.	easily -children's biggest worry is talking to teachers face to face – this is eliminated. The homework diary is very good. Timetables in 90% of cases are brand new to children coming from Primary School.	Pupils planning on going to School could even download the app before they go into Year 8. Email facility – Eliminate the fear factor of speaking to teachers about their worries. This might be particularly useful to a child who is too shy or embarrassed to ask a question in front of the other pupils.	fact that they can virtually 'walk around the school' before they physically enter is a huge plus.
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All five interviewees agreed that the app could help children with the transition, with all giving similar reasons. This is something that really pleased me. Four of the five thought that the direct contact with teachers via the email was a great idea, as it would eliminate the fear factor of speaking face to face with teachers about potential problems. Three of the five commented how the content included, including timetables and maps would also help the children. Interviewee 5, a special needs school teacher, noted that the inclusion of an interactive tour in their own school app proves very popular, especially with autistic children that are starting their school.

4.2.4 Question 4 - Do you think students would enjoy you using this app?

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
Popular - Yeah, well in this day and age like, sure, you can't really get young people off their phone so I couldn't really see how it couldn't be a winner like in that respect,	Popular - Yes, I think the students, they should enjoy it, you know, they're crazy about apps. Maybe if there was games or something, they would enjoy it even more	Popular - Yes, most definitely. Apps are the whole go at the minute. I think they would engage more with information viewed on the app as	Popular - I think all pupils would thoroughly enjoy using this app as it appears to be so a lot more user-friendly than a pen and paper. All pupils are regularly	Obviously not all children are the same, so it's impossible to speak for all of them. However, with the vast majority glued to technology and social media in today's

'cause they're always on phones, technology and iPads and that sort of thing, so you might as well bring it to them and I'm sure it will work well.		opposed to receiving a hard copy.	seen on their phones so anything related mobile technology is bound to be a hit with the pupils.	society I feel it has the potential to be a success with the majority of children. Despite this I would emphasise strongly that it may not be for ALL children.
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All five interviewee's agreed that more and more children are now using apps, which backs up the research in my literature review. Obviously it was reassuring to hear this from teachers. Interviewee 2, similar to interviewee 3, did however state that the inclusion of a game would enhance their enjoyment. Interviewee 3 also specified how the app would be more engaging and enjoyable for children rather than hard copies of information. Interviewee 5 was very cautious with their response, agreeing that the majority would enjoy using it, but strongly indicating that all children are different and every child may not necessarily enjoy using it as much as some of their peers.

4.2.5 Question 5 - Do you think the app would be used more in school, at home or possibly both, with the students?

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
Mobile phone policy - Our school, we don't allow phones in school, or if they were, they'd be confiscated. But I know it could be different for others, maybe even using the	Mobile Phone Policy - The only issue would be the phone policy in school, so this app is only really going to be of use at home. But of course, this might also encourage parental engagement and things like that. Of course, in many schools now including my own there's the	I think it could be used in both environments. For instance, recording homework could be done at the end of class whereas emailing teachers could be done at home.	I think this app would be more so suitable at home however could perhaps be used within school under strict rules. Mobile Phone Policy - In the school I teach in mobile phones are forbidden to be on person within school hours.	Mobile Phone Policy - In our case our students don't have mobile phones, although we do have access to iPads. I think a lot of our children would enjoy it but would need assisted whilst using

<p>app via like an iPad or a tablet in school and use phones at home or if you were staying late or something and you needed it then – outside of school hours sort of thing.</p>	<p>availability of iPads so maybe through this platform they could access the app.</p> <p>But other than that, I can't see any other issues where they may be, an ability for bullying or anything throughout the app. So, as long as it's used correctly and for the best benefit it should be grand.</p>	<p>Obviously recording the homework would probably in 90% of school have to be recorded on a school iPad as opposed (Mobile Phone Policy) to a phone, because most school, especially in Year 8, would be very strict on mobile phones in school. Obviously at home then there would be no problem with using the mobile.</p>	<p>This would mean therefore that this app could be used on the iPads available to pupils or at home.</p> <p>Parents would also be able to use this app as it would keep them informed of their child, holidays, school uniform etc.</p>	<p>the app so at home would rely on parental/guardian involvement and in school would perhaps require a lesson focussing on it.</p> <p>I'm not sure though if it would be a regular lesson in our school, it would be more of a one off.</p>
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The major concern generated from the above question was the fact that the majority of schools have mobile phone policies, which usually state that, their usage in school is forbidden. However, as my literature review displays, more and more schools have access to iPads and tablets now, which all of the 5 interviewees suggested could be used as a platform to use the app within schools. Interviewee 2 claimed the app being used at home could help parental engagement, which would always be welcomed. Similarly, interviewee 5 suggested that the majority of children in their non-mainstream setting would probably require assistance to use the app.

4.2.6 Question 6 - What would your concerns about the app be?

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
<p>Just as mentioned the use of phones within schools. I don't think its justifiable using them just to go and look at a timetable at the end of the day, or take out their homework diary. Obviously then the use of an iPad or tablet would eliminate this concern.</p> <p>But sure, more and more schools now are following this initiative of every first year, having an iPad.</p> <p>That's one thing all our first years students get when they join.</p>	<p>Other than the mobile phone policy I wouldn't have any other real concerns.</p>	<p>Just as I was saying there, about the mobile phones in school and that. That would be my only real concern. If there was schools who didn't allow mobiles and had no iPads then I suppose you could argue that homework diary element of the app would be void.</p> <p>But look, that's only one part of the app. And I suppose you could then turn round and say to me well sure if a school creates an app you would like to think they would have some sort of platform to access it in school.</p>	<p>Well I feel that all schools would definitely benefit from an app like this. However, the only concerns I would mention is as I've already mentioned about making it more user-friendly for EAL pupils with the icons.</p>	<p>My only concern would be how often it would be used by our children. Although, I know from our own, especially at the transition time, that initial virtual tour is very popular with our children</p>

Three of the five interviewees stressed how the issue of using mobile phones to access the app would be their only real concern. Interviewee 4 repeated how the lack of icons included in the buttons could prove difficult for EAL children to navigate throughout the app. Interviewee 5 had a concern about the durability of the app, as they felt in their school it would only be used once. The reason for this is that the teacher would be required to assist the children with the app and felt teachers would only do this once.

5 Chapter Five - Conclusion

In this project, I researched the problems that children face during the transition process from Primary to Post-Primary School. I then designed and created an app to help the children manage this difficult time.

I thoroughly enjoyed completing my Capstone Project and feel it was a very worthwhile experience. From my research, I now have a much greater understanding of the problems that children face during the transition process. I have learned a lot of new skills, which were required to create both the questionnaire and the app.

I created a questionnaire on Microsoft Forms, which was completed by thirty teachers. The results from these questionnaires allowed me to identify what content needed to be included in the app.

Having a variety of teachers in terms of gender, teaching experience and subject areas, allowed me to obtain more accurate and realistic results. The majority of teachers agreed that the transition process is difficult for children and can cause information overload. Despite the fact that most teachers felt their schools make adequate measures to help assist children during this time, the majority agreed that the development of an app would be both appealing and beneficial for children.

I began by planning my app, which involved brainstorming different ideas before settling on a final design. I then had to learn new skills required to use Microsoft PowerApps effectively. I invested considerable time in this, which proved worthwhile, as I learned a great deal and gained new knowledge. From there, I was able to apply the skills to my design and in the end create the app. The finished product functioning correctly has been very rewarding and worthwhile.

On completion of the app, I afforded five teachers the opportunity to trial it. I invited them to discuss their views with me in the form of semi-structured interviews. Following this, I was able to make appropriate changes to the app based on their feedback, which undoubtedly enhanced the app.

In general, the feedback was all very positive. All the teachers were very impressed by the resource. They commented how they believed children would both enjoy and benefit from using the app. This reassured me that the app was a useful tool in aiding the transition process for children. It also gave me a great deal of satisfaction.

Whilst I was very happy with my app, I do recognise that it still has opportunities for further development. If I had a larger time-scale, and possibly a small budget to work with, I would try and take the app to the next level. This would include incorporating virtual reality into my app, with the school tour, as well as a cashless payment system, both ideas being recommended by the teachers interviewed. Also, in terms of testing, with more time, I would like to carry out action research with the children themselves getting to use the app during the actual transition period. As mentioned, this would involve them first accessing the app in the later stage of their P7 year, and allowing them to use it right up until the end of Year 8. This is something which I would be keen to execute in the future and feel it would provide me with more accurate results.

Moreover, my biggest concern about the app has always been the platform in which it can be used. However, having completed the study, it is clear that the majority of schools in Northern Ireland now have iPads, and in my opinion, in the not too distant future, all schools will avail of this facility. Therefore I feel that whilst the app is more suited to be used at home, it can still be accessed in school. In addition, with the growth in popularity of mobile devices suggesting that apps will become more popular in education (Stevenson et al, 2015), I feel this is an avenue that also needs exploiting in the transition sector.

Finally, the way in which children are being educated is changing due to the advancements in technology. Therefore, we must not treat the transition process any differently on a human level. An app to aid the transition can be successful when used to complement current methods, but must not be used to replace them.

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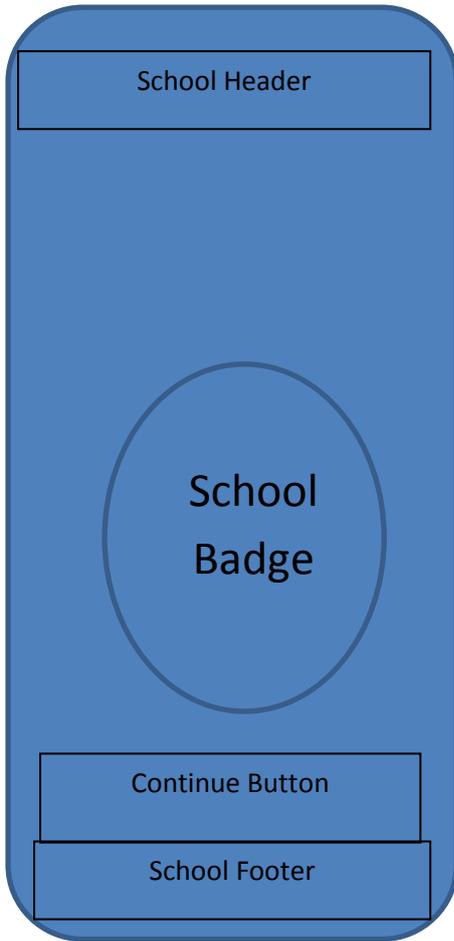
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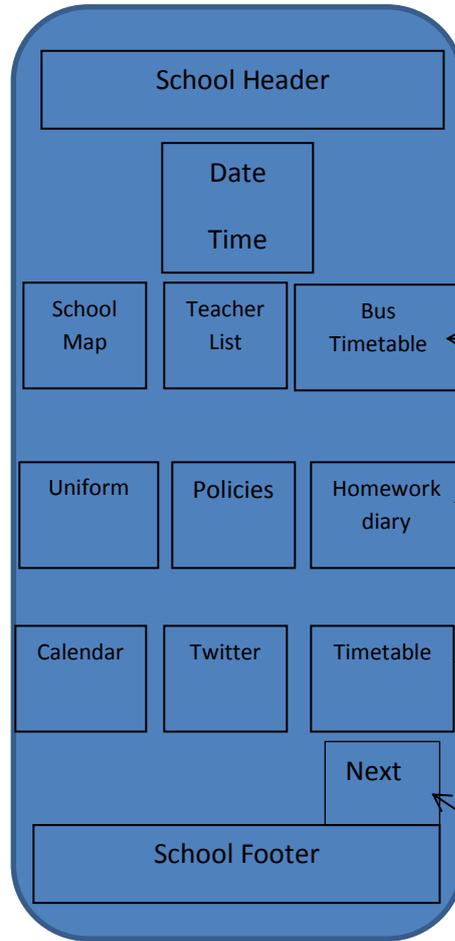
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Appendix - App Design

Welcome Page



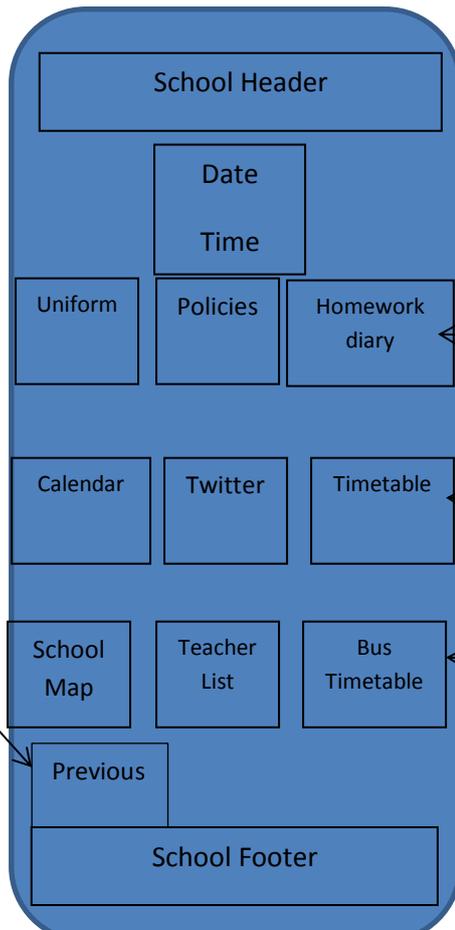
Homepage1



These square boxes represent buttons that when selected, will navigate the user to the appropriate page.

This button will navigate the user to Homepage2

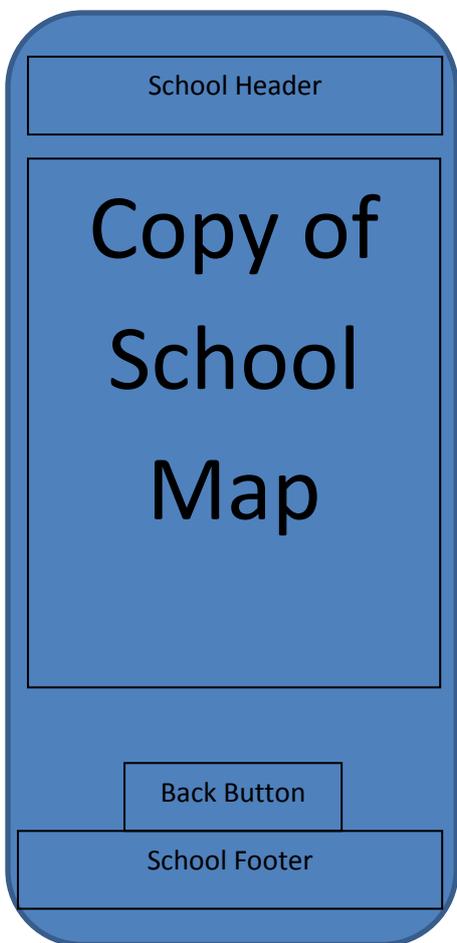
Homepage2



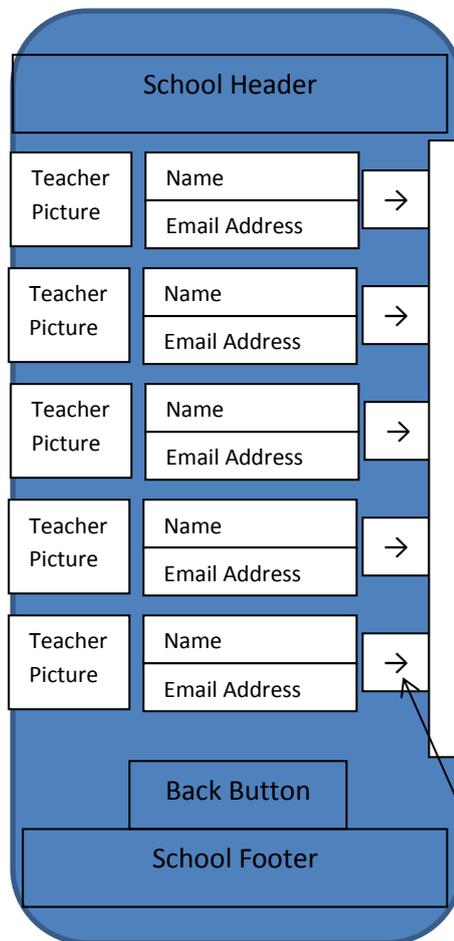
These square boxes represent buttons that when selected, will navigate the user to the appropriate page.

This button will navigate the user back to Homepage1

School Map



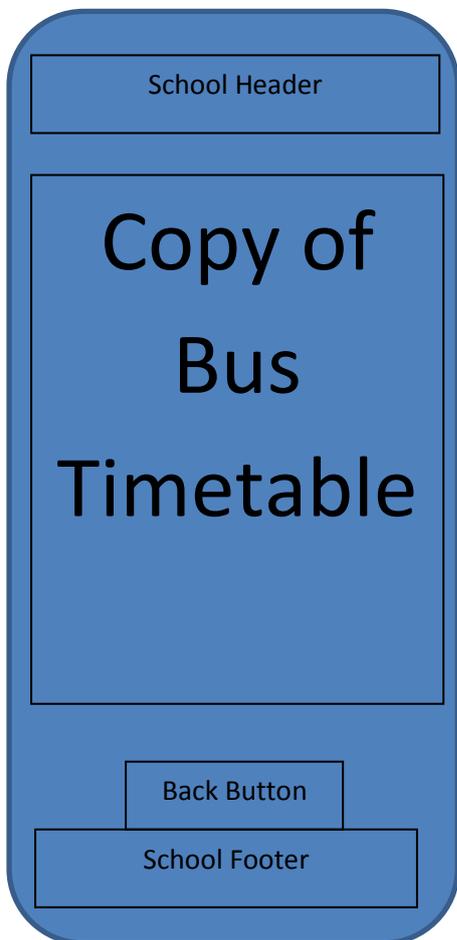
Teacher List



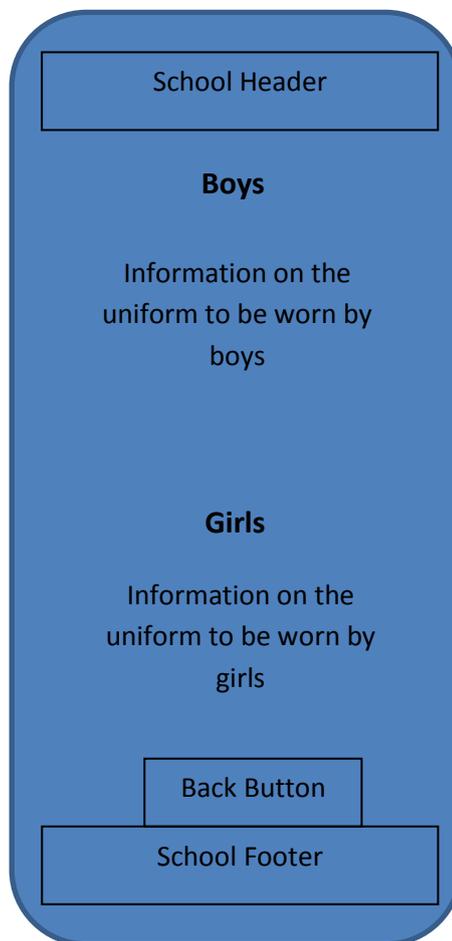
Scroll Bar

These arrows navigate the user to a new email being sent to the appropriate teacher

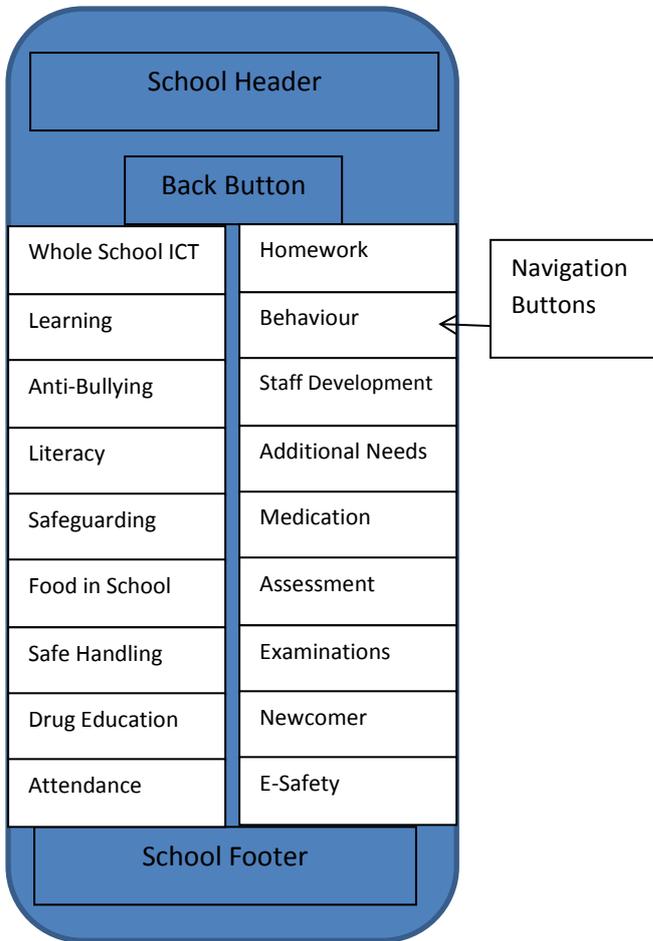
Bus Timetable



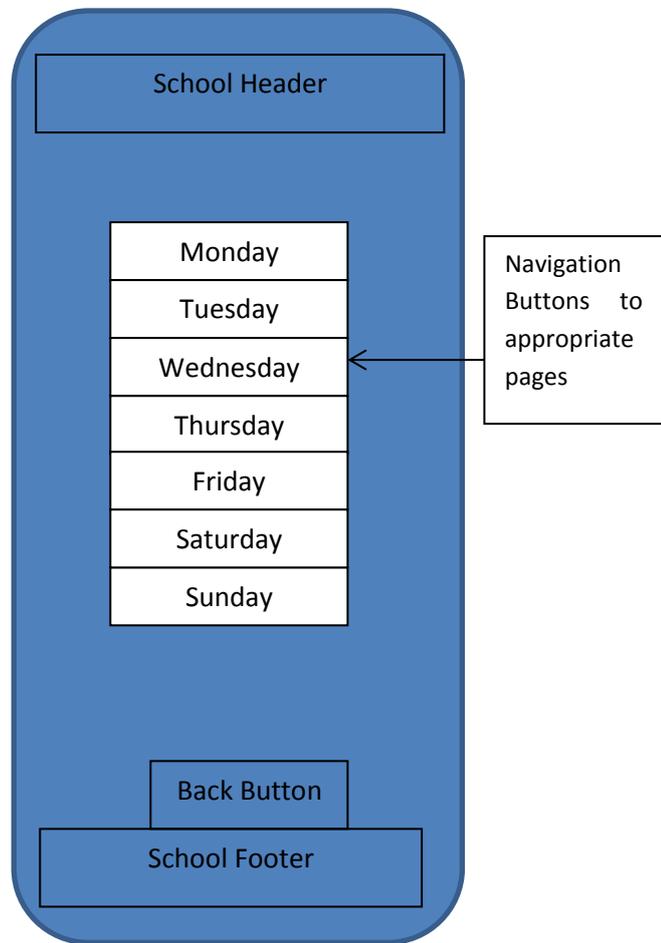
Uniform



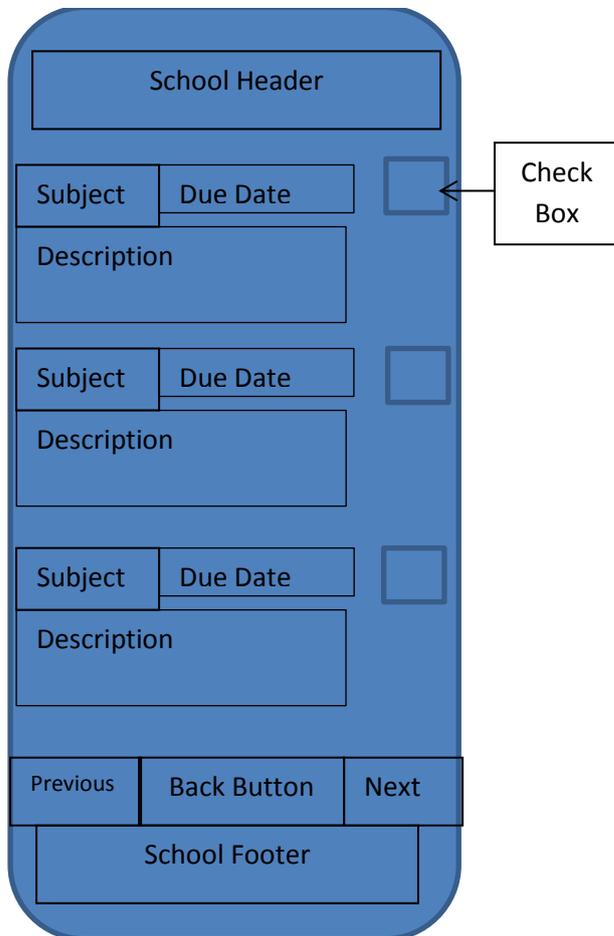
Policies



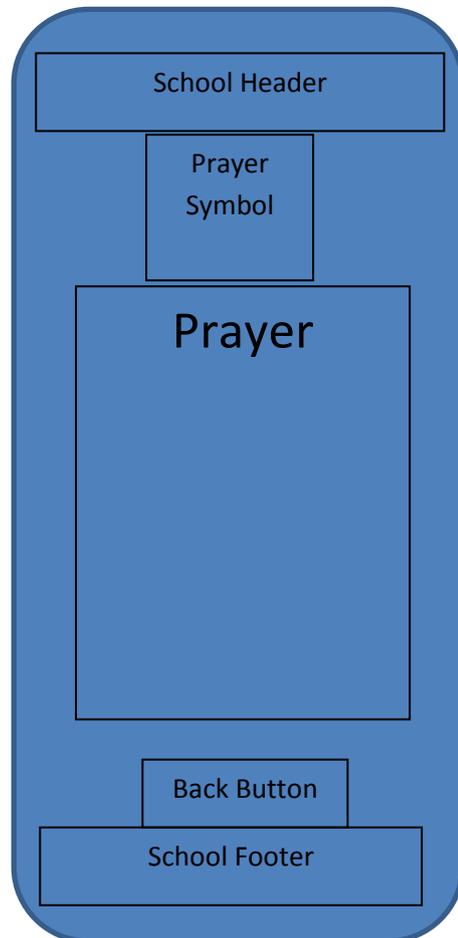
Homework Diary



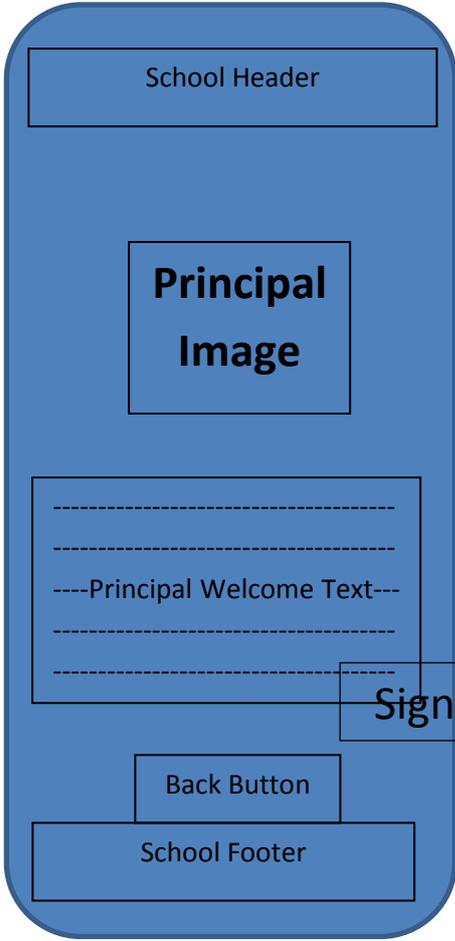
Homework Diary Info Pages



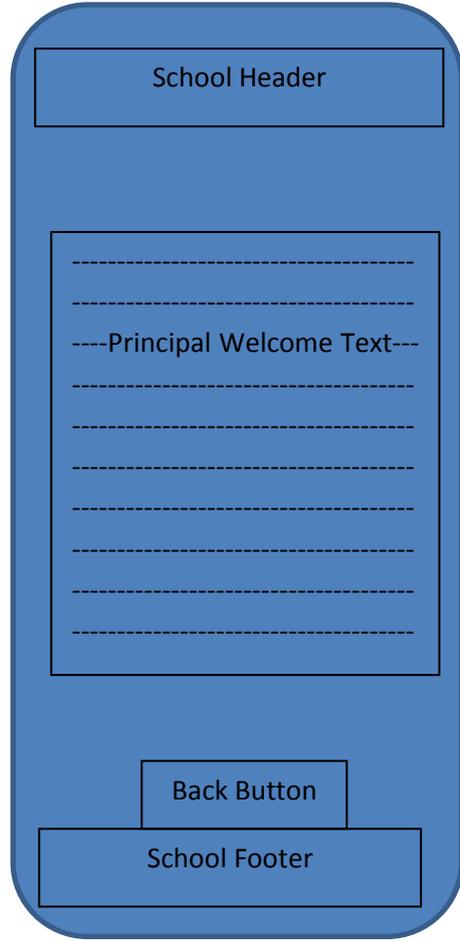
School Prayer



Principal's Welcome

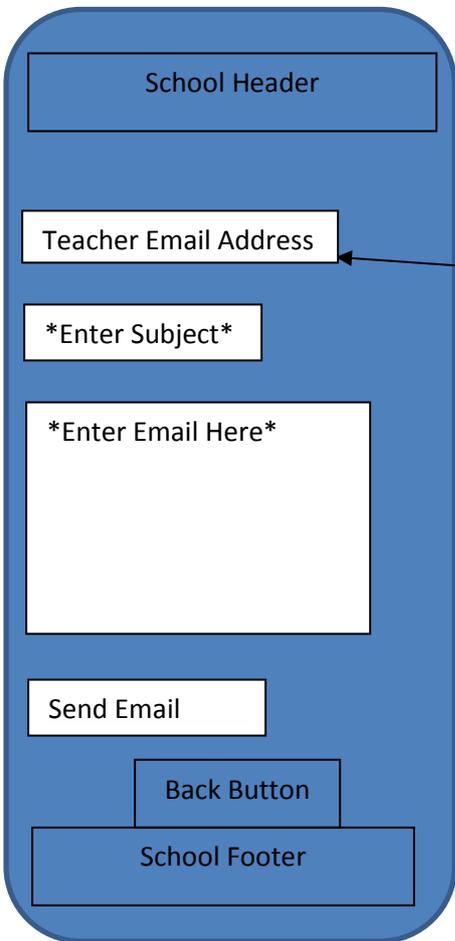


Principal's Welcome2



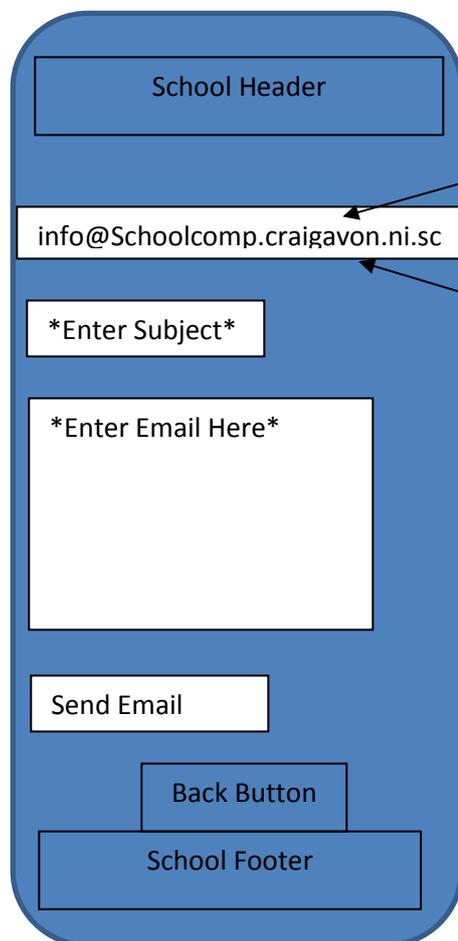
Next

Teacher List Email



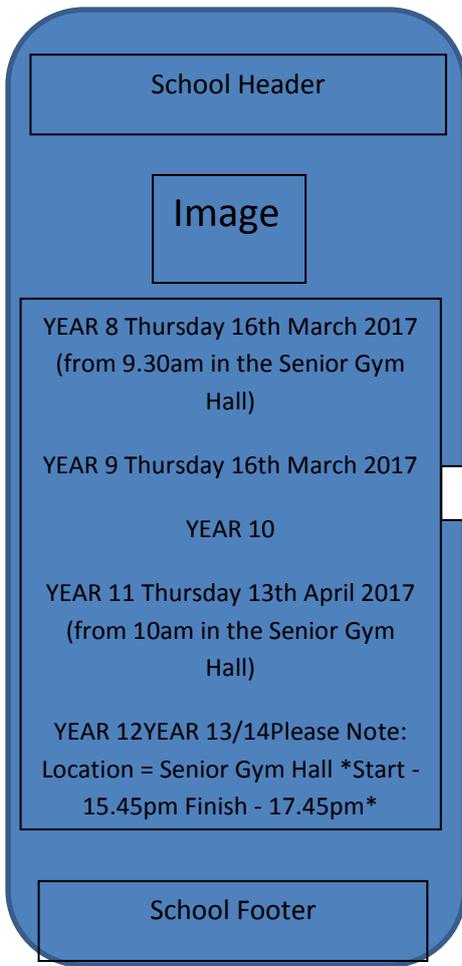
The email address of the selected teacher will appear by default

Contact Us Email

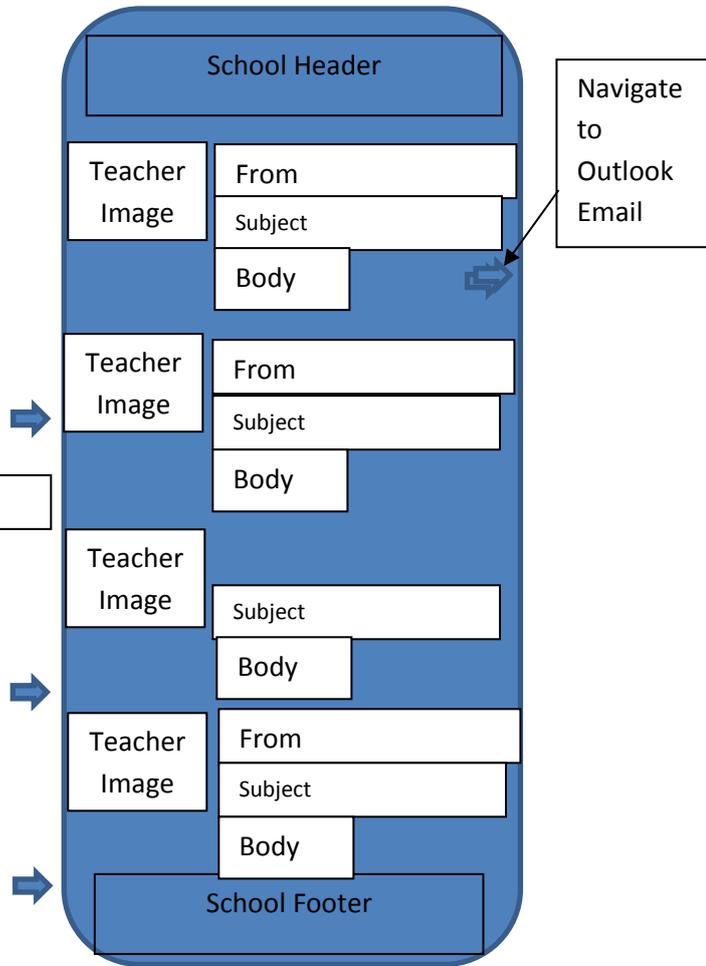


School's email address will appear by default.

Parents Info

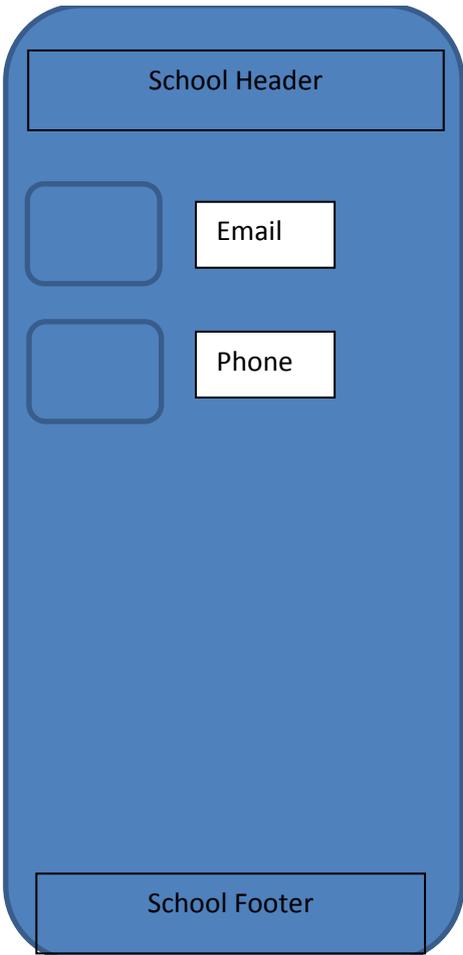


My Emails



ton

Contact Us Page



Timetable

