

USE OF LUNCH CLUBS IN AN INCLUSIVE HIGH SCHOOL WITH STUDENTS  
WITH AUTISM SPECTRUM DISORDER

A Thesis submitted to the faculty of  
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the requirements for  
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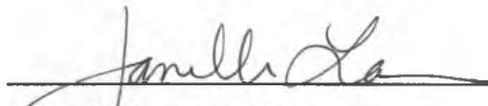
Brittany Skye Flynn

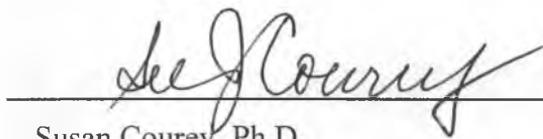
San Francisco, California

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CERTIFICATION OF APPROVAL

I certify that I have read *Use of Lunch Clubs in an Inclusive High School with Students with Autism Spectrum Disorder* by Brittany Skye Flynn, and that in my opinion this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirement for the degree Master of Arts in Special Education: Mild to Moderate Disabilities at San Francisco State University.

  
\_\_\_\_\_  
Janelle Lawson, Ph.D.  
Assistant Professor, Department of Special  
Education

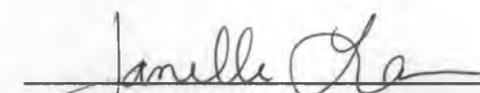
  
\_\_\_\_\_  
Susan Courey, Ph.D.  
Associate Professor, Department of Special  
Education

# LUNCH CLUBS IN INCLUSIVE HIGH SCHOOL WITH ASD

Brittany Skye Flynn  
San Francisco, California  
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Adolescents with Autism Spectrum Disorder (ASD) often have challenges with social engagement and building relationships with peers. These challenges can have lasting effects on these individuals' lives including their happiness, employment, and general sense of fulfillment. Lunch Clubs have been utilized as an intervention with students with ASD to support their social skills. These Lunch Clubs have been shown to have a correlation with increased levels of social engagement and peer interaction for the students with ASD. This qualitative study more deeply analyzed the mechanisms by which this increase in social engagement happens as well as the perceived improvements through the lens of one student with ASD.

I certify that the Abstract is a correct representation of the content of this Thesis

  
\_\_\_\_\_  
Chair, Thesis Committee

5/17/16  
Date

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## **Introduction**

Autism Spectrum Disorder (ASD) is a disorder that has increased drastically in prevalence over the last decade and currently has a prevalence rate of 1 in 68 children (Centers for Disease Control and Prevention, 2014). ASD is characterized by language and social delays including delayed ability in utilizing non-verbal behaviors to regulate interactions as well as a general lack of social or emotional reciprocity (APA, 2000). In adolescence, the social skills required for basic interactions often involve skills such as smiling and making eye-contact, asking and responding to questions, and compliments and greetings (Beidel, Turner, & Morris, 2000). As students develop and age, the social skills required are generally more advanced and harder to acquire, exacerbating the existing challenges for students with ASD. For example, a key component to developing relationships and social reciprocity is understanding the viewpoint of peers and sharing affective experiences; these skills are often not present in older students with ASD (Gutstein & Whitney, 2002).

Individuals with ASD often engage in stereotypy or repetitive interests and behaviors. This can include continuously talking about the same topic even once others in the conversation have moved on or lost interest, and this behavior can further isolate a student socially. Students with ASD also have more difficulties reading social cues and initiating social interactions with their peers. This can limit their ability to read body language or detect nonverbal cues, often a requirement in social interactions. Additionally, adolescents with ASD have shorter relationships with peers and spend less

time engaged in social interaction with peers (Bauminger & Shulman, 2003). This means they are less likely to have lasting friendships or engage in conversations or social interactions both in and out of school settings.

This deficit in social skills has also been shown to correlate with higher levels of depression and anxiety (Gillott, Furniss, & Walter, 2001; Kim, Szatmari, Bryson, Streiner, & Wilson, 2000). These students often indicate a desire to make friends and socialize with peers but their lack of skills inhibits them. They therefore develop loneliness and depression when they are rejected or isolated in school settings.

Researchers Bauminger and Kasari (2000) compared students with ASD to their typically developing peers by asking them about their friendships, understanding of loneliness, and feelings. Not only were the children with ASD significantly more lonely, they had a more incomplete understanding of loneliness as an emotion and had less fulfilling friendships with the friends they did have.

Furthermore, these social delays such as lower quality relationships and an inability to empathize with peers noted in adolescence often continue into adulthood affecting individuals for the entirety of their lives. Individuals with ASD do not “grow out” of social delays or begin to compensate in a way that would allow the deficits to affect them less. These challenges persist into adulthood (Rao, Bedel, & Murray, 2007). Delays in social skills in adolescence are associated with lower employment prospects and therefore lower levels of pay and employment success later in life. Improving socialization and the social abilities of students with ASD before adulthood can improve

their quality of life (Church et al., 2000). Given the severity of the consequences of many of these social challenges and their tendency to last throughout an individual's adult life, supporting the acquisition of social skills for students with ASD should be imperative to us as educators.

### **Current Pedagogy and Interventions**

Educators have attempted to teach social skills in a variety of ways but there is a dearth of research focusing on adolescent-aged students (Bellini, Peters, Benner, & Hopf, 2007; Ostmeyer & Scarpa, 2012). Therefore, there is not a consensus on evidence-based best practices for increasing socialization in high-school-aged students on the spectrum. Current interventions for social skills typically include three categories of teaching: child specific, collateral skills, and peer mediated (Bellini, Peters, Benner, & Hopf, 2007). Child specific includes direct instruction of social skills; students are explicitly taught social skills by adults through modeling and role playing in intervention groups (Tse, Strulovitch, Tagalakis, Meng, L, & Fombonne, 2007). Collateral skills teaching involves teaching skills that could promote social activity such as play or language. An example includes teaching a group of students joint attention training and then tracking social initiations observationally for increases in initiations (Whalen, Shreibman & Ingersoll, 2006). Peer mediated instruction involves the training of typically developing peers to mediate and respond to students with Autism. This has included things like communication book practice where typically developing peers are trained to facilitate

conversations with the use of a book of icons and sentence frames to prompt greetings and responses from the student with ASD (Hughes, et al., 2011).

### **Limitations of Current Interventions**

Meta-analyses of social skills interventions currently being used indicate that many of the strategies being implemented are not particularly successful. Specifically, they lack in their ability to lead to generalization of the skill (Bellini, Peters, Benner, & Hopf, 2007). The most notable commonality between interventions with the highest success rates is their setting. Overall, interventions implemented in the general education classroom as opposed to a resource or pull out room have better rates of generalization (Bellini, et.al, 2007). Similarly, interventions utilizing peers as models or instructional partners as opposed to teachers providing direct instruction show higher levels of generalization (Hughes et al., 2011). These two ideas support the use of inclusion-teaching in the general education setting with the use of typically developing peers- to aid in the success and generalization of a social skills intervention.

Additionally, researchers have found that interventions intended to improve social interactions should target increasing participation in actual social activities. Specifically, the highest predictor of appropriate peer relationships and participation was taking part in a social skills intervention that included participation in a social or community activity such as volunteering for an organization of interest or joining a club of interest as opposed to isolated skills teaching (Orsmond, Krauss, & Seltzer, 2004).

### **Lunch Club Interventions**

Lunch clubs are a school organized club or meeting with any variety of topics or themes that intend to allow students with common interests to interact and engage. Many schools have clubs that meet at lunch time whether it be Chess Club, Dance Team, Mock Trial, etc. At most schools, if a group of students exist with a common interest, that interest can be the topic of a club for them to meet. Lunch clubs also are an opportunity for students with ASD and typically developing peers to interact in a safe and controlled environment but also have the freedom to discuss shared interests and play games. It offers an extra level of security from the playground or hallways but is still unstructured enough to allow the students to facilitate their own interactions. Various versions of lunch clubs have been used as an opportunity for students with ASD to interact with their typically developing peers, such as Circle of Friends, a program where typically developing peers spend their lunch time playing games or engaged in social activities with a student having social challenges (Kalyva & Avramidis, 2005).

Access to peers in this type of natural environment has been shown to have more significant impacts on improving social engagement than direct instruction of social skills. Peer Networks is an example of a lunch club strategy that focuses on providing access to peers. Researchers recruited typically developing peers to meet weekly in a lunch club with identified students with ASD and had the students pick activities and games to play together each week. Students with ASD engaged in significantly more social interactions after being given the opportunity to interact with peers in this environment (Hochman, Carter, Bottema-Beutel, Harvey, & Gustafson, 2015).

Koegel and colleagues (2013) also utilized lunch clubs to investigate the improvement in socialization that results from creating a space wherein students with ASD can interact with typically developing peers who share similar interests. Lunch clubs were started on a high school campus based on the interests of the students with ASD. All other interested students on campus were invited to join the club via flyers and announcements. Initiations with peers and length of engagement in social activities with peers were observed both before and after participation in the lunch club. They noted statistically significant increases in initiations and length of engagement after participation. They concluded that access to general education peers with similar interests through these lunch clubs improved the social skills of students with ASD (Koegel, Kim, & Schwartzman, 2013).

Studies thus far have shown an ability to increase engagement through lunch clubs, they have not, however, been able to gain an understanding of the self-reported feelings of students with ASD and their self-reported benefits of interventions such as lunch clubs. This study attempted to more deeply analyze the social experience of one student with Autism Spectrum Disorder and his participation in a Lunch Club by measuring his attitudes qualitatively both before and after the intervention. This study is founded on the proposition of previous studies, which is that exposure to typically developing peers with similar interests, specifically in a structured and safe environment such as a lunch club, fosters positive social interactions between students with ASD and their neurotypical peers, but further investigates the mechanisms by which this

improvement happens in the high school setting. By focusing on a single case and exploring the experience of the intervention for that student as well as what he perceived to be the benefits of the intervention, this study hopes to present a model of the lunch club intervention on a specific and detailed level to better inform how lunch clubs may be designed and implemented to maximize benefits for adolescents with ASD.

### **Method**

This study utilized a qualitative single case study design to explore a student with ASD's experience in a Lunch Club intervention, as well as his perceived improvements and the observed improvements.

### **Participant**

The participant for this case study was a high school student with Autism Spectrum Disorder, whom I will call John. John is 15 years old, in the 10th grade and currently attends a public charter high school in Oakland, California. John is a Caucasian student from a middle class family. The purpose of his charter high school is to provide a college preparatory education to students who typically come from a low-income family and will be the first in their family to attend college. The demographics for the school are as follows: 45% African American, 41% Hispanic, 2% Asian and 5% White. Additionally, 72% of students qualify for free or reduced lunch and 9% of the student body has been identified for Special Education services.

This study utilized a convenience and purposive sampling strategy. I am a Special Education teacher at this high school and I identified John because of his diagnosis of ASD and because his case manager and advisor have identified some social challenges. Additionally, they noted that he would likely be willing to participate and benefit from an activity such as a lunch club. Following the study's approval by an Institutional Review Board, I began by contacting John's parents to discuss the study and determine if they would be interested in having John participate. I then met with John and his advisor to see if John himself was interested in participating. After both discussions and an opportunity to answer all questions, a formal consent letter was sent home and informed consent from the parents and assent from John were obtained. John's parents were very excited for the club and stated they had been hoping the school would try something like this. John himself said that he had a goal for the year to join a club and therefore was glad this opportunity arose.

John served as a good candidate for this case study because of his willingness to participate in the intervention, desire to be more social at school or improve his social skills, and his demonstrated challenges in the area of social engagement with peers.

### **Lunch Club**

The lunch club was started at the beginning of spring semester and continued for six weeks. John had already been informed of the starting dates of the lunch club during the information meetings, but all other peers were recruited via flyers and school announcements. The club was advertised and described as a social lunch club to hang out,

play games, and talk with your friends and classmates. The lunch club met once a week for the duration of the 35-minute lunch period. The club was intentionally unstructured so that students could choose their own activities. Activities during the club included board games and ice-breaker games initially, however, students then chose their own activities based on the common interests of the group. These included off campus lunch field trips to the park, watching sporting events or videos and listening to music. Students picked their own activities and found common interests among the group to plan. The researcher was present for all lunch club meetings and facilitated some interactions at the beginning of the club. For example, the researcher prompted the students to discuss what activities they would like to do for the next week. As the club progressed the researcher took a more hands-off role and simply observed or played games with the students without actively facilitating conversation or asking questions.

### **Instruments**

Data was collected via a semi-structured interview and observations before and after participation in the lunch club. The interview protocol intended to explore the potential improvements or changes in John's social engagement with peers as well as his self-perceived notions about participation in the club. This was an open interview, allowing for follow-up questions throughout. Questions in the interview covered the following topics: John's level of comfort interacting with peers before and after the club, his activities during a typical lunch period, and any feelings he had about participation in the lunch club.

John was also observed during his lunch period for any changes before and after participation in the lunch club. To conduct the observation, I stood across the main lunch area where I could observe his actions, but not close enough to intrude on his space or for him to notice I was there. I also stood and observed how most teachers would for any assigned lunch duty where they stay in the lunch area to monitor behavior so as not to look out of place or noticeable. Specifically, I was looking to identify any changes in John's level of social engagement. For the purpose of this study social engagement was defined as talking to a peer or engaging in a joint attention activity with a peer (i.e., watching a video together).

### **Data Analysis**

The qualitative data, retrieved through interviews, was analyzed through open coding (Miles & Huberman, 1994). The researcher and a second reader separately analyzed John's interview transcript by reading through line-by-line and noting initial codes. These codes were noted in the margins to summarize larger ideas or capture apparent concepts. Both the pre and post interviews were coded separately from one another. Once the researchers identified codes separately for both interview transcripts (before and after intervention), the researchers compiled their codes and reviewed their notes together to identify and create overarching themes. The researchers read through the codes from both transcripts (before and after intervention) and identified codes that were similar in nature to categorize them into themes. They also looked to identify themes common in both, either because they remained constant or because they changed

between the two interviews. Data was analyzed using an inductive approach; researchers did not begin analyzing with a specific theory in mind but rather analyzed the interview data for new concepts and theories. The three themes identified below are the three most salient concepts that emerged from John's interviews.

Each code and theme was given an operational definition and any discrepancies or disagreements between the two coders were resolved through discussion until a consensus was reached. Therefore each operational definition, of both codes and themes, was agreed upon between both coders to be an accurate representation of the data.

### **Validity**

This study intended to provide an in-depth analysis of the use of a lunch club intervention for a single case from start to finish. The data was triangulated through the use of multiple measures: an interview with the student and observations of the student before and after his participation in the lunch club. Credibility of the data was established through the researcher's pre-existing relationship with the student. As one of his service providers and a teacher at the school, the researcher had established rapport with the student and was, therefore, able to ask pertinent questions and encourage thoughtful answers. It is the researcher's intent to provide transferability by providing as much detail as possible to the context of the use of this intervention and the qualities of this participant. In this way, researchers can better understand the implications of using lunch clubs as an intervention with their own students.

## **Results**

### **Observations**

Before participation in the lunch club, John did not interact with a single peer for the duration of his lunch period. For both of the two lunch observations prior to the lunch club intervention John sat in the same spot along the wall, ate his lunch and watched videos on his phone. He did not engage with any of his peers in this time and he did not seem to notice any activities occurring around him; he did not look up from his phone and lunch during the whole of lunch. Following the completion of lunch, John silently stood up, collected his things and walked to line up outside his classroom door.

When participating in the lunch club John's behavior was very different. He arrived at the club and often asked one of the other students what game they should play that day. He quickly became very engaged in the game and seemed to have a strong desire to win. He also became very animated; for one game the group played he made up songs that correlated with some of the cards and he and another student would often sing them when those cards were played. He also became very playfully competitive with the games. He would say things like "oh I'm going to get you back for that one" when a student played a card against him or use other common phrases like "you all are going down this time!" On one day in particular, the students chose to play Apples to Apples, a word play game. John played "my body" in response to the "delicious" card and the entire table erupted into laughter, including John, for almost the rest of the lunch period.

After participating in the club, but on days when John did not attend the club, his behavior did not appear to have changed significantly. On two subsequent observations during times when John was not attending lunch club, he again sat on the floor with his lunch and his phone and watched videos.

### **Interviews**

John's interview data was analyzed with open coding by two researchers. This process resulted in three themes that are described in the following sections.

#### Theme 1: *Social Isolation*

**Before Intervention:** John's interview data from before the intervention clearly communicated that he spent most of his free time in isolation. When asked what he did during lunch his answer was "sit down, eat my food and watch videos on youtube." When asked if he ever watched videos with other people or talked to other people during lunch he said, "no." John's descriptions of his lunch activities were also very brief. When asked if he watched any videos in particular his response was "no, just random videos." When asked to elaborate he repeated that he sat in the same place each day and liked to watch videos. This input from John is similar to the observations collected; John's level of social engagement was zero.

**After Intervention:** Data from interviewing John following the intervention showed that he still spent his lunchtime on non-lunch club days isolated: "I still like to sit and watch videos. On lunch club days, I come and play games." This information matches what was observed. John answered questions regarding how he spent his

lunchtime very similarly to his answers from before the intervention. When asked if he hung out with any students from lunch club or not, during lunch on non lunch club days he simply said, “nope.” However, on days when John attended lunch club his answers differed. He listed many of the other students that often attended and reported who he talked to most often. He stated that during lunch club activities he sat at the central table with 3-4 other students that regularly attended, “I talk to whoever I’m playing with, usually Greg.” John also said, “we talk about the game or what we’re doing (at lunch club).” On lunch club days he is not isolated from his peers.

#### Theme 2: *Contentment*

**Before Intervention:** Although John spent most to all of his free time isolated from other peers, he communicated that he was content to spend his time this way. When asked why he thought he spent most of his lunch by himself he said, “I just like it better that way.” When asked to rate his level of enjoyment with his lunchtime at school he rated it a 4 out of 5. He enjoyed being able to “relax” and enjoyed non-academic time in his school day: “I get to sit down and relax, and enjoy time without school work.” John also stated that he doesn’t feel like he socializes with peers very often; he said about this, “I think I just like it better that way.” Although he expressed an interest in the lunch club and trying something different during lunch, he was not unhappy with his current activities; he was content with his current lunchtime.

**After Intervention:** John was still very content with his lunchtime both in and out of lunch club. John rated his level of enjoyment at lunch club a 4 out of 5. When

asked what he liked about lunch club he stated, “it was cool, I liked it.” John listed some of the new friends he had made through lunch club and listed the students that he most often interacted with. He stated that he was happy to hang out with these new friends; he did not express extensive enthusiasm or excitement. John maintained a consistent level of happiness and communicated that he was just as content or happy on days that he attended the lunch club as on days that he did not. John also had a very neutral affect in general during these interviews.

### Theme 3: *Structured Social Interactions*

**Before Intervention:** John’s interview from before participation in the lunch club displayed some themes around structured social interactions. When asked who his friends were at school he listed students from an after school organization called BUILD. He stated that his friends were mostly people from this organization and not really other kids from class. When asked about his comfort level with talking to other kids at school he stated it was a 3 out of 5. He elaborated on this to explain that the things that make him most uncomfortable when talking to other students is working in groups when other students are off task or talking about things outside of the assignment or activity. The overall theme of this information seemed to communicate that John is more comfortable interacting with peers in structured activities such as his after school organization and he is less comfortable when environments lack structure such as students getting off task in the classroom and talking.

**After Intervention:** The lunch club provided more structure to John's lunchtime activities. He answered that on lunch club days he comes and plays board games and participates in activities with the other kids that come to the lunch club. When asked if he likes coming to lunch club, John stated that he does because "it's something different to do; it's fun." John also communicated that he is more comfortable interacting with peers during the lunch club than in outside settings. While talking to peers in general was a 3 out of 5 comfort level, at lunch club John says that his comfort level is a 4 out of 5. When asked why he thought that was he wasn't quite sure but attributed it to having something fun to do and that conversations revolved around the games they were playing or activities they were doing. John stated, "It's more fun to talk about something you like to do."

### **Discussion**

This study's aim was to further investigate the use of Lunch Clubs to increase a student with ASD's social engagement with peers, and to focus on the mechanisms by which this may happen. John's participation in this study led to higher levels of social engagement within the lunch club setting and also revealed insights into John's perspective on social activities and participation in the lunch club.

John demonstrated the ability to engage and interact socially. He did well with social interactions in structured environments, whether this was group work in the classroom, after school organizations, or the lunch club; John was able to form

relationships and engage socially. John's social engagement did not change outside of lunch club. He remained isolated during lunchtime on non-lunch club days and his descriptions of his level of comfort interacting with peers remained constant. However, John's statements suggest that it may not be necessary to expect students like him to engage in the same way as neurotypical peers. When talking about why he spends many lunch periods alone, John reported that he "likes it better that way" and that it is his time to "relax and take a break." It is possible that although he chooses to isolate himself from peers during this unstructured time, he is doing so for his own contentment.

This case study only followed the experience of one adolescent student. However, by limiting the size of the study, we were able to analyze John's experience in depth and get individual feedback from him on his experience. John's feedback indicated that choice played a large role in the success of this intervention for him. John enjoyed choosing activities to do during the lunch period and playing games with people that had similar interests. It also indicated that John is content with his current day to day. He does not feel anxiety when presented with structured social interactions and he chooses to opt out of unstructured social time, such as during his lunch period in the cafeteria.

This study has corroborated previous research (Hochman, Carter, Bottema-Beutel, Harvey, & Gustafson, 2015; Kalyva & Avramidis, 2005; Koegel, Kim, & Schwartzman, 2013) that indicated that lunch clubs such as this one could be used to potentially increase social engagement. John's level of interaction with his peers increased dramatically within the Lunch Club setting and he communicated being more comfortable interacting

with students within the lunch club setting. John's experience in the Lunch Club also illuminated interesting points about generalization of skills. John did not generalize any increases in social engagement to other settings. Previous studies on lunch club interventions have also shown a lack of generalization (Bellini, Peters, Benner, & Hopf, 2007). It does push us, as a community, to consider what functioning social skills should look like. Special Education functions on a deficit model; students are compared to their peers and the national average, to determine how far their skills are from a typically developing peer; however, John's experience implies that we should not expect students with ASD to socialize in the same ways as their typically developing peers.

When planning interventions for students with social challenges, we should be considering all of these factors. We should consider, for example, whether students choose not to interact out of preference or if they have less of an ability to interact due to social anxiety. Research has shown that anxiety or an inability to socialize could be detrimental to our students (Gillott, Furniss, & Walter, 2001; Kim, Szatmari, Bryson, Streiner, & Wilson, 2000); however, types of engagement or settings in which engagement occurs may vary across students. In John's case, anxiety did not prevent him from engaging during non-lunch club days; he simply preferred not to engage. When given the opportunity to engage in a structured setting, he demonstrated the ability to do so. Perhaps it is more important to ensure our students have the skills required to interact and provide them structured environments to interact in, rather than expect their levels of social engagement to be the same as their neurotypical peers across all settings.

Supporting students with ASD with their social development is a complex task with many factors to consider. While it has been shown that developing social skills within this population is imperative, it is not yet clear how best to do this. More importantly, the research has not yet defined what the standard for good social development should be. Currently, we compare students with ASD to their typically developing peers; John's experience implies that this may not be the best standard for comparison. Further research should be done to investigate what skills or qualities of social engagement are most closely tied to success later in life. Church, Alinsanski, and Amanullah (2011) showed that low social engagement was tied to lower levels of employment later in life; however, it is unknown whether the students struggled to interact at all or if they were students like John in that they seemed to excel in structured settings but opted out of other social engagement and therefore appear different from their peers. Making this distinction would be very important in determining where we as educators should focus our interventions and also to what standards we should be holding these students.

While John is one important voice, future research should explore the experiences of other students with Autism during structured and unstructured time. Future studies could explore the lunch club intervention in various settings and continue to investigate whether social skills obtained in lunch clubs generalize to settings outside of lunch clubs. Future qualitative research should include additional participants from various schools and locations to add voices to the experience of individuals with ASD who may exhibit

social skills deficits. Understanding how best to support individuals with ASD in their acquisition of social skills is a critical part of ensuring their long-term personal, social, and academic success.

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Appendix  
Interview Protocol:

**Pre-interview.**

1. What do you do during lunch time?
2. Do you spend lunch with any other people?
3. On a scale of 1-5, 1 being not at all and 5 being a lot, how much do you enjoy your lunchtime here at school?
4. Who are some of your friends here at EA?
5. On a scale of 1-5, 1 being not at all and 5 being a lot, how comfortable do you feel talking to other kids at EA?

**Post-interview.**

1. What do you do during lunch time, anything different from before?
2. Do you spend lunch with any other people?
3. On a scale of 1-5, 1 being not at all and 5 being a lot, how much do you enjoy your lunchtime here at school?

Has this improved since coming to Lunch Club?

4. Who are some of your friends here at EA?

Do you think you have more now?

5. On a scale of 1-5, 1 being not at all and 5 being a lot, how comfortable do you feel talking to other kids at EA?

Has this improved since coming to Lunch Club?