NATURALISTIC OBSERVATION OF ENGAGEMENT AND DISENGAGEMENT WITHIN PROFESSIONAL DEVELOPMENT IN EDUCATION

Research Article

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Abstract

The purpose of this naturalistic observation study was to observe, in a natural setting, the actions of attendees at educational professional development conferences. In doing so, it was hoped that numerous behaviors could be observed that would indicate a level or extent of engagement or disengagement within presentations. It was found that the observed sample was often communicating with others or looking around the room while the presentation was unfolding. Fiddling with objects was common since arriving at a presentation takes time to settle. Overall, the audience was mostly distracted and not engaged which would logically diminish the utility of the professional development.

Keywords: Naturalistic Observation, Professional Development, Engagement.

1. Background

1.1. Effectively educating English language learners

Engagement and its opposite, disengagement (inattention) stands at the core of this study as beacons within the Professional Development (PD) experience. Harris (2008) claims engagement includes *behavior, emotions, social, academic, cognitive, and institutional elements*. Engagement, therefore, is quite a multidimensional construct weaving together several variables (Järvelä et al., 2016) that are interdependent yet intersecting. Admittedly, engagement resides within three realms, namely behavioral, emotional and cognitive domains (Jones, 2008). It is these three realms that interact as educators pursue professional learning and development within an often, lifelong professional development journey. Educators attend physically and process events cerebrally (learner presence) in order to shape and process professional learning, yet within the learning, there are problematic human actions that may diminish learning such as inattention (distraction), non-engagement and negative engagement behaviors (Noonan, 2016; Webster & Hayes, 1997).

The significance of this study is rooted in the focus on engagement, disengagement, and professional development. The professional development (PD) aspect of this inquiry delves into PD as a social enterprise involving social learning theory (Bandura, 1977) wherein learning can be "characterized as formal or informal types of activities. Formal activities include courses and workshops offered in-house, by educational institutions, or by professional associations. Informal activities include attending conferences, discussions with colleagues, participating in e-mail discussion lists, [and] reading the professional literature . . ." (Attebury, 2017, p. 232). These activities develop an "individual`s skills, knowledge, expertise and other characteristics" (OECD, 2009, p. 49). However, past experiences (outcomes) may cause some participants to expect that certain behavior (actions) will produce desired outcomes (valued), some actions have little effects, and other actions may

cause undesired outcomes (Bandura, 1977). To be engaged seems to be a state of being that enhances learning hence noting the extent of engagement could indicate the extent of learning.

Each of us is born with a potent evolutionary enthusiasm to move forward and learn as we make sense of our surroundings and the larger world (Piaget, 1952). Professional learning activities engage our being as we use our minds and bodies and often a wandering mind can cause us to become less engaged or perhaps our own bodies distract us intrinsically (hunger, discomfort) (Noonan, 2016). Being distracted within PD may render the experience less useful, however positively engaged participants may leave the same PD experience with opposite perceptions (Webster & Hayes, 1997). Consider the work of Trowler (2010) in Table one, who suggests that all three domains (behavior, emotion, and cognition) manifest as signs of engagement, non-engagement and negative engagement.

Table 1. *Engagement states of students*

	Positive Engagement	Non-engagement	Negative engagement
Behavioural	Attends lectures, participates with enthusiasm	Skips lectures with no excuse	Boycotts, pickets or disrupts lectures
Emotional	Interest	Boredom	Rejection
Cognitive	Meets or exceeds assignment requirements	Assignments late, rushed or absent	Redefines parameters for assignments

(Trowler, 2010, p. 6)

Within the emotional domain, feelings can lead to various actions and within the cognitive domain there are perceptions of self, which can dictate the levels and form of engagement, for instance, if an educator believes they are capable they may also experience a sense of higher self-efficacy (Cifre, Salanova & Rodríguez-Sánchez, 2011). This, in turn, may cause the person to be enthusiastic, focused and work beyond expectations, a clear indicator that they are engaged (Webster & Hayes, 1997).

Conversely, the individual in 2018, who is not engaged may use mobile technology to remove themselves from within the PD mentally while still being physically present. This distracted state is akin to being absent and can demonstrate a level of boredom. Negative engagement could surface via a series of behaviors that are disruptive such as unwrapping items, eating, talking over the presenter, and oppositional participation, for example (Noonan, 2016).

Globally, the notion of engagement and disengagement is prevalent, for instance, the Teaching Council of Ireland (2011) suggests that there is a ". . . continuum of teacher education [that includes] . . . the formal and informal educational and developmental activities in which teachers engage, as life-long learners" (p. 5). What is of interest herein is the emphasis on engagement; in addition, Yoon (2017) working in South Korea found that teachers' professional development was shaped the "professional intimacy between members" (p. iv), which suggests a level of engagement within a professional context that is quite important. In the U.S.A., Baker (2014) found that asking, listening, and trusting their opinion concerning professional development experiences was important in reframing the relevant and practical experiences of teachers (iv).

Moreover, "once a teacher is engaged in learning, the product of professional development should be sustained teacher and student growth" (Baker, 2014, p. 87). Again, the prerequisite of engagement surfaces in Baker's research. Meister (2010) demonstrated that educators were more engaged if they perceived the experience as a 'self-journey' wherein the experience is chosen via democratic means leading to a level of learner autonomy. Noonan (2016) claims that self-determination theory (SDT) "has demonstrated for decades, intrinsic motivation – defined in part by individuals' satisfaction of the needs for autonomy, competence, and relatedness – is essential for engagement" (p. 47).

In addition, past research has determined that collaboration coupled with sustained professional development, and alignment within personal contexts were critical factors in teachers' own professional development (Baker, 2014). Alo (2010) realized meaningful engagement emerged from connections made within professional development that complemented daily praxes: Less engagement was witnessed in professional development that was not empowering (Crafton & Kaiser, 2011; Turner et al., 2014). "Put simply: teacher engagement matters in professional learning, because if teachers are disengaged they are unlikely to learn" (Noonan, 2016, p. 6).

1.2. Purpose

The purpose of this study was to observe in a natural setting the actions of attendees at educational professional development conferences. In doing so it was hoped that numerous behaviors could be observed that would indicate the extent of audience engagement or disengagement within the presentation.

2. Theoretical framework

The need for professional development is undeniable and well documented in the education literature that reaches back many years (Houle, 1984; Hattie, 2009). Educators engage in continuous life-long professional learning via development that usually involves primary training followed by ancillary training (Diaz-Maggioli, 2004; Lawless & Pellegrino, 2007). Professional development presents opportunities to move beyond what is currently known or done to a broader and deeper understanding and proficiency (Murray, 2014). Endorsing PD acknowledges and illuminates the needs of adult learners rather than emphasizing deficits (Templeton & Tremont, 2014).

Of interest is the notion put forward by Taipale, Selander, Anttila, and Nätti (2011) which suggests engagement at work increases with age. This ageism is not offensive since it takes time to discover what is meaningful in a career, herein suggesting meaningfulness is "a state that specifically relates to the positive feelings that work is worthwhile or important" (p. 2205). From the onset of an educator's career what is meaningful can change just as practice can change. Therefore, PD may not always be meaningful at the time it is experienced due to the change in the meaningfulness of the material presented in the professional learning activity. As such, the significance of this inquiry is embedded in the focus upon engagement, disengagement, learning and professional development of educators.

Professional development is not exclusive to any geographic area in the world and as a result, many authoritative voices emerge for instance, from New Zealand it has been suggested that "it is important to engage the teachers sufficiently during the learning process to deepen their knowledge and extend their skills in ways that improved . . . outcomes" (Hattie, 2009, p. 12). This is not a straightforward task since beginning teachers may be enthused about content yet mid-career educators are looking for more variety while late career educators may *not* be looking for professional development (Richter et al., 2011). Nonetheless, there are many who call for personalized, professional development to increase

confidence and thereby improve teaching and the achievement of those they teach (Hargreaves & Fullan, 2012).

Entering into professional learning activities is a means to be accountable (Hargreaves & Shirley, 2009) when an educator makes the effort to attend a PD responsibility to move forward, locate answers and improve; it is a time of optimism or at least it could be (Webster & Hayes, 1997). Presently there is a paucity of NO research within post-secondary PD; this could be related to Noonan's position (2016) wherein engagement "is seldom considered in the descriptions or assessments of effective professional development" (p. 3).

3. Methodology

This research involved the discovery of new facts and reinterpretation of existing knowledge concerning professional development engagement. A naturalistic observation (NO) mode was used since there was no intervention "staged by the researcher or direct interaction with people; [NO] does not include collecting personal information that will be disseminated with visual materials; and . . . there is no reasonable expectation of privacy among those being observed" (Government of Canada, 2017a, p. 1). This NO was completed over an extended period of time, at several sites and required no ethical approval.

To be clear, naturalistic observation is frequently used to study behavior in a natural environment (Goffman, 1959) and because knowledge of the research can be expected to influence behavior, naturalistic observation implies that the subjects do not know that they are being observed and, hence, cannot give their free and informed consent (Lincoln & Guba, 1985). As noted in the *'studies exempt from review'* section of Government of Canada, Tri-Council Policy Statement (TCPS), naturalistic observation studies in public places where there is no expectation of privacy are exempt from Research Ethics Board (REB) review. "The observation does not allow for the identification of the subjects, hence it is regarded as minimal risk" (Government of Canada, 2017b, p. 1).

Observation is often carried out by a person who records perceptible (sensory) data via record keeping and therefore it is deemed a very important means of evidence collection (Jones & Somekh, 2006). Within an observational study there is opportunity to gather data by observing behavior, events, and noting physical characteristics in their natural setting just as Coplan, Ooi, and Rose-Krasnor (2015) realized in their NO study of schoolyard social participation and Vlachou, Andreou & Botsoglou (2013) collected data regarding the prevalence rates *of bullying* among preschool children. In an earlier NO study Amato (1989) observed caretakers of children in public places, while Graham and Wells (2001) studied bar patrons, and recently, Grady, Ale, and Morris (2012) used naturalistic observation to research social behaviors during preschool drop-off. In each case, in spite of the complexity of human behavior, observers were able to record, analyze, process and report what they observed. However, the current study was motivated due to a paucity of NO research within PD.

NO is a frequent topic in comparative psychology and a means to engage psychology students in authentic research projects that provide learning opportunities which support professional development (Millar, 1977). Within this current study, each observation was linked to my ontology or means of seeing the world and my place within it (Lincoln & Guba, 1985). My assumptions, for instance, were evident in the naming, , and interpretation of observations. In doing so I professionally developed as I acted (observed), reflected upon my observations and often revised my next steps due to this systematic approach, not unlike the action researcher who would complete recursive cycles (phases) of action.

In this naturalistic observation (NO) study I was the sole observer entering a specific environment (conferences), observing behavior, and recording in a consistent strategic written manner. I did not alter or influence the behaviors observed hence my naturalistic observations are generalizable due to the relatively high levels of external validity. My observations were covert even though everyone may have known they were being observed in this public place.

Within this qualitative research effort, there was an interpretive element as it depends upon the observation that is defining and redefining what is observed via human senses (Stake, 2010). My observations were direct, as I observed interactions, processes, and behaviors as they occurred within an authentic context. I observed presenters at conferences and attendees in a manner that was both customary and natural. This study was informed by my experience as an observer in many action research projects I have undertaken over the years, yet this NO was conceptually different.

NO is often used to generate new ideas as it provides the researcher with the opportunity to study the entire situation (Sussman et al., 1993). NO can result in either quantitative or qualitative data and observations can be coded into numerical form via counting the number of times a behavior occurred, and then analyzed quantitatively (Coplan, Ooi, & Rose-Krasnor, 2015). For instance, Piaget (1952) emphasized naturalistic observations as part of the investigative process utilizing a constructivist mode. People seem to construct knowledge daily, therefore, observing in natural environments provides researchers with access to the learning process. As well there was an element of confirmability wherein evidence was grounded within the observer's perceptions (Lincoln & Guba, 1985).

I accessed the ERIC database via the Nipissing University website. Key phrases such as English language learners, professional development, and challenges for teachers were first explored. Using titles and abstracts to further guide our search, we began focusing upon specific professional development subjects and initiatives. Training programs and initiatives regarding differentiation, character development, assessment for learning, and diversity training were themes prevalent in the material offered. While reading and analyzing literature, we began to question what educational authorities were doing to question the level of engagement teachers were displaying with regard to effective professional development.

3.1. Method

Data collection included the NO chart recording, field notes, and memos to self (emails) which were used herein to capture data that may not have fit into tables and served to triangulate assertions (Creswell, 2014). Collateral data such as dates, times and location were recorded to include both context and the order of events. My NO data supplied mostly qualitative data as I observed and re-examined recorded observations to realize (emergent commonalities & themes) results (Given, 2008). I required only paper (chart below), pencil, timer/iPhone and a segment of time (observation strategy) as a schedule.

Table 2. *Data recording chart*

Non-Attentive Behavior Types/Engagement	Frequency Person A	B	C	D	E	F	G	H	Total
Fiddling with objects									
Looking around the room									

Comical movements							
Communicate with others							
Doodling							
Engaged with Presenter							
Making distracting noises							
Staring into space							
Other (Eating/typing/on phone)							

Settings included four 2017 conferences attended in Australia, (Canberra) January 16-18 and February, 5th to the 7th (Melbourne), and in April in Texas (San Antonio), and May 25-28, in Toronto, Ontario, Canada). Attendance included venues such as presentations, roundtables, and seminars where data were charted, as well as a narrative record, recording behavior observed exactly as it occurred and revisited this later to organize and further reflect upon observations. A *time sample mode*, was used by recording what a person was doing at regular intervals, as well as *event sampling* to record every instance of the behavior and lastly, some *situation sampling* was used to observe the behavior in more than one situation enhancing generalizability since more than one situation enhances external validity (Creswell, 2014).

Using the above Table one as a structure, data were recorded (one-minute observations) and later coded (one-minute), assigning a different number to each category of the behavior being observed. This open coding allowed for inspection, conceptualization, and categorized via emerging primary patterns and themes. Noted themes became a classification system and each category and subcategory was examined and further coded (Glaser & Strauss, 1967). Also, axial coding was applied via the rearrangement of data to detect associations between core categories and subcategories. Conference presentations were 20 minutes each and there were four presentations observed in each conference attended.

I observed one person, and then switched to another and repeated this therefore in each presentation two people were observed randomly for 20 minutes (10 minutes for each person). I attended four sessions at each conference and developed 8 random observations of people at each conference. I attended four conferences in the winter and spring of 2017 developing 32 cases (observations). The structure was a means to focus my attention while providing structure as I strategically participating in the conference presentations in a passive yet goal-oriented manner (Creswell, 2014; Jones & Somekh, 2006).

To explain and define the observation table descriptors seems necessary yet familiar as the observed behaviors were deemed common actions observed at past conference sessions. For instance, when a person was adjusting hand-held materials, clothing or objects at arm's length this was identified as fiddling with objects. Looking around the room was noted as a head movement that was not just looking at the presenter it was directed within a 360-degree range. Comical movements included slipping, dropping, or spilling mishaps that provoked a sense of comedy/humor from within the observer. Communicating with others could be both

non-verbal and verbal and doodling was anytime a person was using an instrument to draw. Being engaged appeared as the participant looked directly at the presenter and/or seemed engaged listening, nodding or quiet/non-verbally. Distracting noises included activity such as unwrapping, unbundling or moving in a manner that caused sound and distracted others. Starring was a gaze down, or out a window in one-direction. The descriptor of 'other' was a catch-all for eating/phone use/early departure and any surfacing behavior not prepared for.

3.2. Advantages

From the onset of this study, the researcher was aware of several advantages and limitations of naturalistic observation. Observations were unfiltered and naturally occurring in an authentic environment; the authentic observation of action/behavior was noted precisely as it occurs in real time hence it was very authentic (ecological validity) and fit within a natural setting (ecology) (Lincoln & Guba, 1985). In addition, the external validity of findings was detected in authentic settings, therefore, the researcher can generalize to the larger population (Drost, 2011). NO is observation without intervention and can be very descriptive, practical and easily confirmed (Lincoln & Guba, 1985).

3.3. Limitations

No cause and effect relationships were found (no manipulation of the variables was attempted) and I did not control the environment. Therefore, several variables were linked to the observations yet my observations were biased because of my expectations, pre-understanding and past experiences attending conferences and these biases did influence how I perceived and interpreted my data (ontology) and my place in the study (Creswell, 2014; Drost, 2011). As well, my presence may have altered behavior of the observed to some degree yet I tried to be both discrete and unobtrusive. Admittedly, this study had limited reliability since it is unlikely another researcher would make comparable observations in the manner I did (Drost, 2011; Jones & Somekh, 2006).

4. Results

Each location was open to the public and was also a site of an educational conference. Of the four conference sites, two where in Australia and two were in North American (Canada, United States). The researcher attended conference sessions and presented one session at each location. Session attendance ranged from 6 to 27 people in each session where NO occurred. The following tables illustrate observations made during sessions attended at each conference location. The first conference attended occurred early in the year and a little over 1200 educators/people attended. The researcher signed up for each session well before the conference began and once on-site the room location was identified, and arrival was 5-10 minutes before the onset of each session.

Session seating for the observer was always near the rear and in the middle to allow for unrestricted views of the observed. Due to the experience of the observer at conferences these steps did not seem unfamiliar or awkward and many previous conferences provided the necessary practice to complete this NO. At Canberra eight people were observed in total; two at each session attended by the observer. Behaviors surfaced and where noted using the observation table below and anecdotal notes were taken to catch details within the observation. Often a self-email was sent to document data further as reflections upon observations occurred.

Table 3. *Observations: Canberra, Australia*

Non-Attentive Behavior Types/Engagement	Frequency Person A	B	C	D	E	F	G	H	Total
Fiddling with objects	4	2	2	2	2	1	1	4	18
Looking around the room	7	2	2	3	1	3	1	2	23
Comical movements	2	0	0	1	0	0	0	0	3
Communicate with others	1	0	3	2	4	2	0	0	12
Doodling	0	0	2	1	0	2	0	1	6
Engaged with Presenter	4	5	4	1	2	3	3	4	26
Making distracting noises	0	0	2	1	2	1	0	0	6
Staring into space	0	1	5	3	0	2	1	1	13
Other (Eating/typing/phone)	1e	1p	0	3	5	2	1	1	14

(10 Minutes per person)

At Canberra, one session I planned to attend was canceled so I quickly selected another session and arrived in time for the beginning of the presentation. I noted a large group in attendance of 18 and selected a seat near the back and just one row behind the two people I observed who were seated in front of me just one seat to the left and one to the right.

As noted in the above table most a total of 121 behaviors (actions) were noted; of these several actions occurred more than others. For instance, approximately 21.4 % of the actions observed indicated people were engaged with the presenter. 19 % of the time people observed were not focused on the presenter and instead, they were looking around the room. About 15% (14.8) of the observed action indicated people were fiddling with objects, such as a purse, backpack, paper, pen, iPad, laptop or phone. Another action noted regularly was other (eating, typing, and phone use) and in this case, 11.6% of people were not engaged and instead focused on other actions. All NO actions observed occurred from the time a presenter began until the presentation was completed which in all cases was 20 minutes.

Table 4. *Observations: Melbourne, Australia*

Disengaged / Engaged behaviour	Frequency Person A	B	C	D	E	F	G	H	Total
Fiddling with objects	1	3	2	4	1	2	4	1	18
Looking around the room	2	1	2	1	1	2	3	1	13

Comical movements	0	1	3	2	1	0	1	0	8
Communicate with others	3	1	1	1	2	0	0	0	8
Doodling	1	2	1	1	0	0	3	1	9
Engaged with Presenter	2	2	1	4	3	2	4	2	20
Making distracting noises	2	1	3	4	1	1	2	2	16
Staring into space	1	2	0	0	1	3	2	2	11
Other (Eating/ on phone)	4p	2p	1p	3e	0	3t	0	0	13

At Melbourne, the session was delayed six minutes due to technical issues which were attended to within a few minutes as I sat near the back of the room, just to the right of two people observed. As noted in the above table four most a total of 115 behaviours (actions) were noted, for example, approximately 17% of the actions observed (20) indicated engagement with the presenter. 15.6 % were observed fiddling with objects (18). About 14% (total of 16) of the observed indicated people were making a distracting noise (shuffling paper, opening or closing bags and sort personal objects). Looking around the room in this session was noted equally (13) with 'other' (eating, typing, phone use) at 11.3% of time people were not engaged and instead focused elsewhere. Again, this NO observation occurred during the 20 minutes of a conference presentation.

Table 5. *Observations: San Antonio, TX, U.S.A.*

Non-Attentive Behavior Types/Engagement	Frequency Person A	B	C	D	E	F	G	H	Total
Fiddling with objects	1	0	0	0	3	3	2	4	13
Looking around the room	1	1	3	4	0	1	0	2	12
Comical movements	0	1	0	1	2	0	0	0	4
Communicate with others	4	2	3	1	0	1	0	1	12
Doodling	0	0	0	3	1	0	0	1	5
Engaged with Presenter	5	2	3	1	3	4	4	5	27
Making distracting noises	2	0	0	0	0	0	0	0	2
Staring into space	1	0	0	1	0	1	0	0	3
Other (Eating/ on phone)	4p	2p	3p	3p	4p	2e	1e	1t	20

At Texas (U.S.A) several people arrived late and several left early, however, the observed were not part of the observation, yet this movement of people proved to be somewhat, distracting for me and others. As documented a total of 98 behaviors (actions) were noted and several actions occurred more frequently. For instance, approximately 27.5 % of the actions observed indicated people were engaged with the presenter. 20 % of the time people observed were noted eating or using their phone and deemed unfocused on the presenter. 13% of the actions noted were linked to fiddling with objects, such as a backpack, paper, pen, iPad, or laptop. Another action noted at 12 % were people not engaged, instead looking around the room or talking to others (12%). This talking was less disruptive since the session was held in large ballrooms and people were quite spread out.

Table 6. *Observations: Toronto, Ontario, Canada*

Non-Attentive Behavior Types/Engagement	Frequency Person A	B	C	D	E	F	G	H	Total
Fiddling with objects	0	1	0	0	1	0	4	4	9
Looking around the room	2	1	1	3	0	0	1	3	11
Comical movements	0	0	0	0	0	0	0	0	0
Communicate with others	4	4	3	1	0	0	3	3	18
Doodling	0	0	0	0	0	3	0	1	4
Engaged with Presenter	5	6	6	2	1	1	2	4	27
Making distracting noises	0	0	0	0	0	1	0	0	1
Staring into space	3	3	0	2	3	2	2	1	16
Other (Eating/on phone)	2p	3p	2p	3e	1p	1e	1t	1t	14

As noted in the above table most a total of 100 behaviors (actions) were recorded. Of these several actions occurred more than others; approximately 27% of the actions observed indicated people were engaged with the presenter. 18 % of the time people observed were not focused on the presenter and instead, they were talking to others. Sometimes the talking was on the phone and at times distracting noises included activity such as unwrapping lunch as one presentation was at lunchtime and caused many to move in a manner that caused sound and distracted others.

About 16% of the observed was staring off into space, which is different from looking around the room, in that the observed were static and appeared to be deep in reflection/thinking mode. 14% of the time was observed as 'other' behavior eating, typing, and using their phone. Again, all NO actions observed occurred from the time a presenter began until the presentation was completed which in all cases was 20 minutes.

Table 7. *Summed observations of eight audience members at four conferences*

Non-Attentive Behavior Types/Engagement	Total Number of Observations
Fiddling with objects	58
Looking around the room	59
Comical movements	15
Communicate with others	78
Doodling	4
Engaged with Presenter	27
Making distracting noises	1
Staring into space	16
Other (Eating/typing/phone)	14

5. Discussion

Herein this researcher implemented NO to document the observed behaviours of people who attended education conferences as a means of PD. The significance of such an enterprise is tied to levels of disengagement and engagement noted within various contexts. In doing so, certain determinations can be proposed that illuminate the extent of learning within a professional development experience (context).

Context is relative to the "purpose and perspective. It is argued that, in understanding anything, the analyst cannot avoid relying on inherited background assumptions, and these provide the context for what is observed" (Hammersley, 2008, p. 122). This background is bound within a reflexive awareness that serves to mediate interpretation before, during and after NO. Hammersley (2008) cautions:

When the knowledge generated from a specific setting appears to be context specific and unique, it is often dismissed as too subjective and not useful for other settings; however, the specificity of the setting and the results that emerge from within can be informative rather than detracting. (p. 123)

Data collected emerged from the unstructured observation that had as its foci engagement and as the NO unfolded, categories surfaced dues to the observations from within PD experiences.

Both attendance and participation in educational conferences was herein deemed PD that was viewed from a constructivist paradigm which has learning unfolding as participants experience mental stimulation to a point where knowledge is created (meaning and understanding) within a social context (Postholm, 2012).

This NO study documented participant action (behavior) in a systematic and strategic manner to realize both useful data and guide interpretations of engagement and/or disengagement within the PD experience (Drost, 2011). Perspectives articulated within this NO study were reached after documented observations were revisited recursively over a period of months following conference attendance. Data emerged from field notes, memos to self (emails) and observation tables above. The following chart displays the summed NO results graphically and supports assertions put forward in the results and discussion.
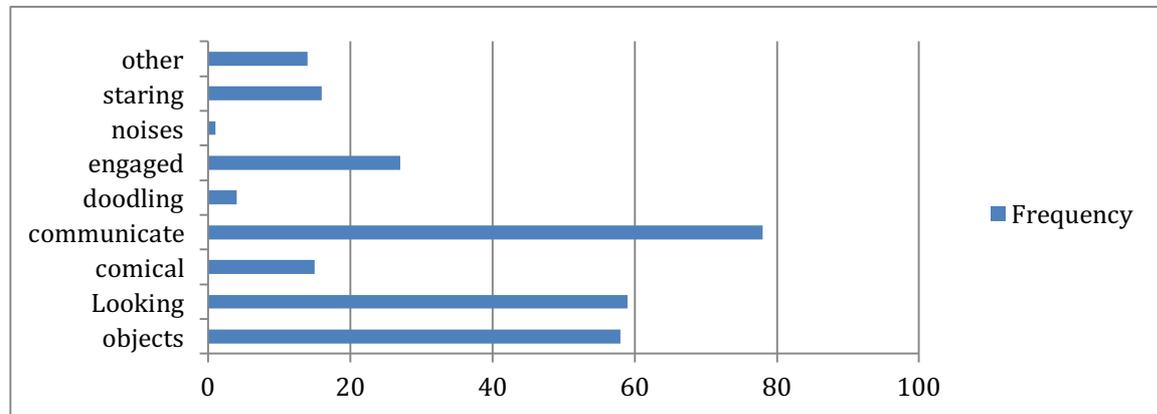
Figure 1. Table one data as a bar graph of collective behaviors observed (*n*=32)

Clearly overall results in Table one indicated that the observed sample was often communicating when observed, and the action of looking around was prevalent while the presentation was unfolding. Fiddling with objects was common since arriving at a presentation takes time to settle and as the presentation moves forward the audience adjusts and responds in a manner that may necessitate this fiddling. While the study set out to ascertain the extent of engagement or disengagement it is true that these determinations are little more than interpretive and inductive outcomes of what was observed via the strategic and systematic documentation. However, within "any professional learning experience, individual teachers may find a variety of features appealing or off-putting" (Noonan, 2016, p. 67).

A global view of data is possible via figure two below as each site has a characteristic profile that is similar to each other site therefore, a common profile of audience (participant) action during professional development venues regardless of geographic location is apparent. Somewhat obvious is the peak for Toronto and Texas in terms of engagement and to a lesser extent in Melbourne and Canberra. Therefore, it might appear that people were engaged however when summed totals for distracted behavior are considered via several actions the fact is people were for inattentive within professional development sessions. This finding can be linked to earlier research by Calvert (2016) who realized that PD was "not a dichotomous, all-or-nothing proposition in which teachers are either fully engaged or completely disengaged" (p. 4). The engagement/disengagement relationship is variable. Webster-Wright (2010) was less tentative suggesting that many participants may be dismissive of PD learning in general and Noonan (2016) suggests, "merely making PD content-focused, job-embedded, and sustained will not ensure high levels of teacher engagement. . . [which] is critically important for learning" (p. 8). A few researchers have suggested that PD should provide opportunities for active learning (Desimone, 2011; Kazempour & Amirshokoohi, 2014) and enable collaboration (Stewart, 2014). Nonetheless, PD remains a means to learn and reform education while improving various personal, professional and political outcomes.
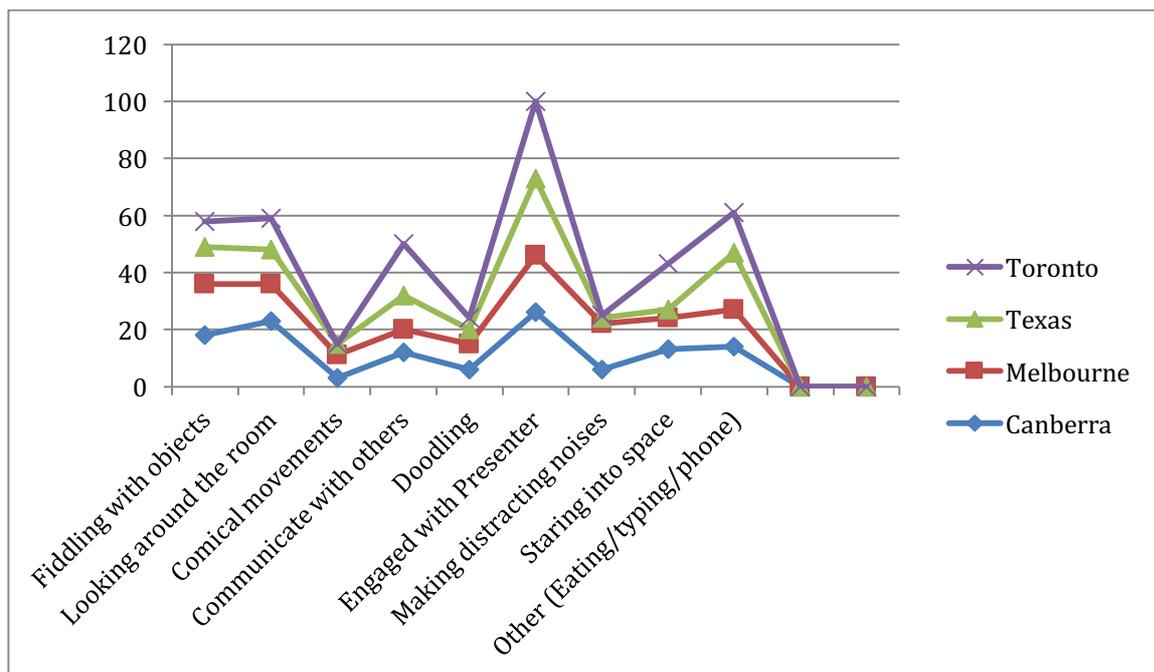
Figure 2. Summed actions from each site (*n*=32)

Being disengaged was signaled by a lack of attention towards the presenter as evidenced by behaviours such as communication with others, looking around the room, fiddling with objects, staring off into space or using a mobile phone and/or eating (other) during the presentation. Certainly, the observed level of engagement was not as dominant as being disengaged/inattentive/distracted as noted in Figure one above. This outcome complements the work of Turner et al. (2014) who found that meaningfulness of PD played a significant role in the level of engagement which in turn seemed to be related intrinsic motivation, connectedness and authenticity of professional learning.

Noonan (2016) reports that even a "massive investment in PD had a little apparent impact on teaching quality, as measured by multiple modes of teacher evaluation" (p. 10). Participants at these conferences did invest time and significant funds to attend yet many seemed dis-engaged as the PD was less meaningful, unrelated to their local context, not directed towards current needs or participant driven. Noonan (2016) concludes that "professional learning – like all learning – is experienced and interpreted at the level of the individual" (p. 12) therefore if PD is at another level it instigates disengagement. Participants were attempting to "to self-organize experience and behavior" (Deci & Ryan, 2000, p. 231) in an attempt to be autonomous within each PD experience it is believed.

Reflecting upon the results a number is realizations emerge as they have in other NO studies. First, NO is non-intrusive (O'Neill, 2008). Second, NO is authentic as it is set within a natural context (Lincoln & Guba, 1985) providing high levels of validity. Third, "the adult learning process is complex, context-bound, and highly personal. As a result, there is no single theory of learning that can be applied to all adults" (Corley, 2011, p. 1). Engagement, disengagement, and interest levels vary dependent upon distractions both internal and external and the local context which can impact the extent of engagement. Admittedly, a person's understanding and enactment of adult learning theory is as important as the PD. Noonan (2016) suggests self-determination theory (SDT) "has demonstrated for decades, intrinsic motivation. . . is essential for engagement" (p. 47). It could be that a level of inattentiveness signaled via certain behaviours were a means to communicate to the presenter that the current mode of presentation was not engaging (Deci & Ryan, 2014).

6. Conclusion

The purpose of this study was to observe in a natural setting the actions of attendees at educational professional development conferences. In doing so it was hoped that numerous behaviors could be observed that would indicate a level or extent of engagement or disengagement within presentations. While certain assumptions were used to guide this study the admission of bias which is a limitation does mitigate certain conclusions. The implications of this NO are many for example, the sample population did demonstrate a frequently disengaged state of being over time via specific actions observed, which leads to the conclusion that professional development of this nature is less than engaging and of questionable benefit unless the audience member is intrinsically motivated to do so and values the presentation.

Another implication can be linked to Guskey (2002) who, like others found that unsuccessful professional development fails to engage participants (intrinsically motivate). PD must be linked to the unique needs of each learner (Timperley, 2011), relevant (Avolos, 2011) and provide opportunities for collaboration (Stewart, 2014) while being meaningful (Turner et al., 2011). What is certain at this point is that engagement "is seldom considered in the descriptions or assessments of effective professional development" (Noonan, 2016, p. 3). PD needs to have relevance, complement the needs of the participant and enable hands-on authentic learning (progressive).

My previous 25 years of experience at conferences informed my action and impacted my perceptions and interpretations (ontology). My experience may have actually misled me at times since digital natives today can do more than one thing at a time (multi-tasking). Nonetheless, my next steps in this research will include more observers and more observation to add to the credibility of the results of this study and future NO efforts.

References

Alo, E. (2010). Democratic approaches in education and language teaching. *Interchange*, *41*(2), 123-132.

Amato, P. R. (1989). Who cares for children in public places? Naturalistic observation of male and female caretakers. *Journal of Marriage & Family*, *51*(4), 981-990.

Attebury, R. I. (2017). Professional Development: A Qualitative Study of High Impact Characteristics Affecting Meaningful and Transformational Learning. *Journal of Academic Librarianship*, *43*(3), 232-241. doi:10.1016/j.acalib.2017.02.015

Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27, 10-20.

Baker, E. (2014). *Exploring meanings of professional development: Teacher perspectives* (Unpublished doctoral dissertation). University of Missouri, Kansas. Kansas City, Missouri, U.S.A.

Bandura, A. (1977). *Social learning theory*. New York, NY: General Learning Press.

Calvert, L. (2016). *Moving from compliance to agency: What teachers need to make professional learning work*. Oxford, OH: Learning Forward and NCTAF. Retrieved from https://learningforward.org/docs/default-source/pdf/teacheragencyfinal.pdf

Cifre, E., Salanova, M., & Rodríguez-Sánchez, A. M. (2011). Dancing between theory and practice: Enhancing work engagement through work stress intervention. *Human Factors and Ergonomics in Manufacturing & Service Industries, 21*, 269-286. doi:10.1002/hfm.20232

Coplan, R. J., Ooi, L. L., & Rose-Krasnor, L. (2015). Naturalistic observations of schoolyard social participation. *Journal of Early Adolescence*, *35*(5/6), 628-650. doi:10.1177/0272431614523134

Corley, M. (2011). TEAL Center fact sheet no. 11: Adult learning theories (18-21). In Just Write! Guide (18-21). Washington, DC: The Teaching Excellence in Adult Literacy (TEAL) Center, U.S. Department of Education. Retrieved from https://teal.ed.gov/tealguide/adultlearning.

Crafton, L., & Kaiser, E. (2011). The language of collaboration: Dialogue and identity in teacher professional development. Improving Schools, *14*(2), 104-116.

Creswell, J. W. (2014). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. http://doi.org/10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2014). Autonomy and need satisfaction in close relationships: Relationships motivation theory. In N. Weinstein (Ed.), *Human motivation and interpersonal relationships: Theory, research, and applications*. Dordrecht: Springer Netherlands. Retrieved from http://nrs.harvard.edu/urn-3:hul.ebookbatch.SPRGR_batch:9789401785426

Desimone, L.M. (2011). A primer on effective professional development. *Phi Delta Kappan, 92*(6), 68-71.

Diaz-Maggioli, G. (2004). *Teacher-centered professional development*. Alexandria, VA. Association for Supervision and Curriculum Development.

Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives, 38*(1), 105-124. Retrieved from http://www.education.uwa.edu.au/research/journal

Given, L. M. (2008). Naturalistic Inquiry. *The Sage Encyclopedia of Research Methods*. (pp. 548-551) London, UK: Sage.

Glaser, B., & Strauss, A. (1967). *The discovery of Grounded Theory: Strategies for qualitative research*. Chicago: Aldine.

Goffman, E. (1959). *The Presentation of self in everyday life*. Garden City, NY: Doubleday.

Government of Canada. (2017b). Panel on Research Ethics. Tri-Council Policy Statement – Chapter 10.3. Retrieved from http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-   eptc2/chapter10-chapitre10/

Government of Canada. (2017a). Panel on research ethics. Tri-Council Policy Statement Chapter 2.4. Retrieved from http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/chapter2-chapitre2/

Grady, J. S., Ale, C. M., & Morris, T. L. (2012). A naturalistic observation of social behaviours during preschool drop-off. *Early Child Development & Care*, *182*(12), 1683-1694. doi:10.1080/03004430.2011.649266

Guskey, T. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice, 8*(3/4), 381-391. doi: 10.1080/13540600210000051 2

Hammersley, M. (2008). Context and contextuality. *The Sage Encyclopedia of Research Methods*. (pp. 122-123) London, UK: Sage.

Hargreaves, A., & Fullan, M. (2012). Professional capital: Transforming teaching in every school. New York, NY: Teachers College Press.

Hargreaves, A., & Shirley, D. (2009). *The fourth way*. Thousand Oaks, CA: Corwin Press.

Harris, L.R. (2008) A phenomenographic investigation of teacher conceptions of student engagement in learning. *Australian Educational Researcher*, *35*(1), 57-79.

Hattie, J. A. C. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. London, UK: Routledge.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81-112.

Houle, C.O. (1984). Continuing learning in the professions. San Francisco, CA: Jossey-Bass.

Järvelä, S., Järvenoja, H., Malmberg, J., Isohätälä, J., & Sobocinski, M. (2016). How do types of interaction and phases of self-regulated learning set a stage for collaborative engagement? *Learning & Instruction*, *43*39-51. doi:10.1016/j.learninstruc.2016.01.005

Jones, R. D. (2008). Strengthening student engagement. International Center for Leadership Education. Retrieved from: http://sam.spnetwork.org/spn/media/files/articles/research/Strengthen%20Student%20Engagement.pdf

Kazempour, M., & Amirshokoohi, A. (2014). Transitioning to inquiry-based teaching: Exploring science teachers' professional development experiences. *International Journal of Environmental & Science Education*, 9, 285-309.

Lawless, K., & Pellegrino, J. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research, 77*(4), 575-614.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

Malott, K. M. (2004). Reflections on an international conference: Istanbul, Turkey. *Family Journal*, *12*(4), 350-351. doi:10.1177/1066480704267276

Meister, D. G. (2010). Experienced secondary teachers' perceptions of engagement and effectiveness: A guide for professional development. *Qualitative Report, 15*(4), 880-898.

Miller, D. B. (1977). Roles of naturalistic observation in comparative psychology. *American Psychologist, 32*(3), 211–219.

Murray, J. (2014). Teacher educators' constructions of professionalism: a case study. *Asia-Pacific Journal of Teacher Education*, 42, 7-21.

Noonan, J. (2016). Teachers Learning: Engagement, Identity, and Agency in Powerful Professional Development. (Doctoral dissertation), Harvard Graduate School of Education, Boston, MA., U.S.A.

OECD. (2009). OECD TALIS Database. Retrieved from http://www.oecd.org/berlin/43541636.pdf

O'Neill, P. (2008). Deception. *The sage encyclopedia of research methods*. (pp. 548-551) London, UK: Sage.

Piaget, J. (1952). *The origins of intelligence in children*. New York, NY:International Universities Press.

Stewart, S. (2014). Transforming professional development to professional learning. *Journal of Adult Education, 43*(1), 28-33.

Sussman, S., Hahn, G., Dent, C.W., Stacy, A.W., Burton, D., & Flay, B.R. (1993). Naturalistic observation of adolescent tobacco use. *International Journal of Addiction, 28*, 803–811.

Parsons, J., & Taylor, L. (2011). *Student engagement: What do we know and what should we do?* Alberta, Canada: University Partners.

Postholm, M. B. (2012). Teachers' professional development: a theoretical review. *Educational Research, 54*(4), 405-429.

Richter, D., Kunter, M., Klusmann, U., Lüdtke, & Baumert, J. (2011). Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities. *Teaching and Teacher Education*, 27, 116- 126. doi: 10.1016/j.tate.2010.07.008

Somekh, B., & Lewin, C. (Eds.). (2006). *Research methods in the social sciences*. Thousand Oaks CA: Sage.

Stake, R. E. (2010). Qualitative research: Studying how things work. New York: Guilford Press.

Taipale, S., Selander, K., Anttila, T., & Nätti, J. (2011). Work engagement in eight European countries. International Journal of Sociology and Social Policy, 31, 486-504. doi:10.1108/01443331111149905

Teaching Council of Ireland (2011). *Policy on the continuum of teacher education.* Maynooth: Teaching Council of Ireland.

Templeton, N., & Tremont, J. (2014). Improving professional practice: Mentoring as job-embedded professional development. *Texas Study of Secondary Education, 23*(2), 24-28.

Timperley, H. (2011). *Realizing the power of professional learning*. New York: Open University Press.

Trowler, V. (2010). *Student engagement literature review*. United Kingdom, York: Higher Education Academy.

Turner, J. C., Christensen, A., Kackar-Cam, H. Z., Trucano, M., & Fulmer, S. M. (2014). Enhancing students' engagement: Report of a 3-Year intervention with middle school teachers. *American Educational Research Journal*, *51*(6), 1195–1226. http://doi.org/10.3102/0002831214532515

Vlachou, M., Andreou, E., & Botsoglou, K. (2013). Bully/Victim problems among preschool children: Naturalistic observations in the classroom and on the playground. *International Journal of Learning: Annual Review, 20*77-93.

Webster, J., & Hayes, H. (1997). Audience engagement in multimedia presentations. *The DATA BASE for Advances in Information Systems*, *28*, 63-77.

Webster-Wright, A. (2010). *Authentic professional learning: Making a difference through learning at work* (Vol. 2). Dordrect, Netherlands: Springer.

Yoon, K. (2017). Professional *Development and its impact on teacher and pupil learning: A community of practice case study in South Korea* (Doctoral dissertation). University of Birmingham, England, UK.