

In Situ: Researching corporate diversity initiatives with game developers

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ABSTRACT

This paper explicates the design and development of a feminist action research pilot that studied and supported the launch of a diversity initiative within a major game development studio. Drawing on methods from design research including rapid ethnography and model making, we describe the stages our pilot study followed, including key models and high-level findings, as well as outline the ways in which we collaborated with our research partner in this initial stage. Use of these methods helped us build an integrated model that can be used as a strategic tool to direct the focus of ongoing work by our partner and other developers. By sharing our process, we hope to illustrate one way that researchers might engage design research methods in service of equity work of this nature in partnership with the game industry.

Keywords

diversity in games, game development, rapid ethnography, feminist action research, feminist game studies

INTRODUCTION

With the ongoing polarisation of political views around the globe and the amplification of far right ideologies in plain sight, building a diverse workforce in game development remains a hot topic. In this wider ‘charged’ context, many larger game companies are looking to address how they might attract, and retain, a diverse workforce that goes beyond a ‘young white male’ demographic.

In Situ is a feminist action research (FAR) project that examines the opportunities around, and impact of, internal and external efforts aimed at creating a diverse and inclusive work culture for people who identify as women working in the game industry. This is an ongoing collaboration that studies and informs diversity, inclusivity and belonging (DIB) task forces launched at a major game development studio in 2018. The opportunity to work alongside the launch of an initiative like this offered a unique research context in which the researchers were embedded in a corporate setting at key moments

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over a period of eight months. This paper will discuss the design and development of this participatory research that ran alongside the creation and rollout of internal DIB¹ task forces. The intent of this paper is to share approaches and methods from our pilot for others interested in applied research of this nature. Funded by ReFiG², an international SSHRC-funded network of researchers and industry leaders committed to promoting diversity and equity in the game industry, *In Situ* is a research study that seeks to examine the factors that create an environment and culture of DIB for game developers. While the initial scope of the study was focused on women-identified developers, the research team took an intersectional approach to start to explore DIB characteristics beyond gender (Collins & Bilge 2016; Crenshaw 1990).

RESEARCH DESIGN

Fostering successful DIB initiatives is difficult. The topic is broad, complex and boundless and goes beyond any one context or organization. Efforts to foster diversity, inclusivity and belonging need to be ongoing. As a challenge area, DIB constitutes a classic “wicked problem” (Buchanan 1992). Use of design research methods to build a range of functional conceptual models for ongoing use was an important component of this research, with an acknowledgement of the complexities involved in working towards a more equitable environment for game workers. No individual initiative, or company, can ‘fix’ this “wicked problem”, instead multiple players (pun intended) need to come together to take ongoing steps to work together towards a more liveable future for all.

Our research incorporated design research methods, which are approaches to primary research that include a mixed method approach of problem-solving through the understanding of human experience and need. The focus of design research is application: designing solutions with and for people with a participatory mindset centred around uncovering insights and generating strategies with the end users of the solutions (Sanders and Stappers 2012). This research takes a mixed methods approach to the synthesis of complex information from a wide range of sources, from primary and embedded observation of user-needs and organizational culture to the scanning of industry trends and literature. This synthesis is an abductive sense-making process, which unlike deductive or inductive knowledge “...allows for the creation of new knowledge and insight” (Kolko 2010, 20) for creative problem solving. We took insight from both contextual (emic) and theoretical (etic) approaches to create a systemic framework to map issues arising in the domain, creating a model to design interventions in a systematic manner, as opposed to reactive and ad hoc. Our approach utilized a mixed method framework, pragmatic in approach and transformational in its agenda. It continues within the critical responses to constructivist methodologies who advocate for more explicit social change agendas, in partnership with research participants, rather than seeing them as subjects (Creswell & Creswell 2018).

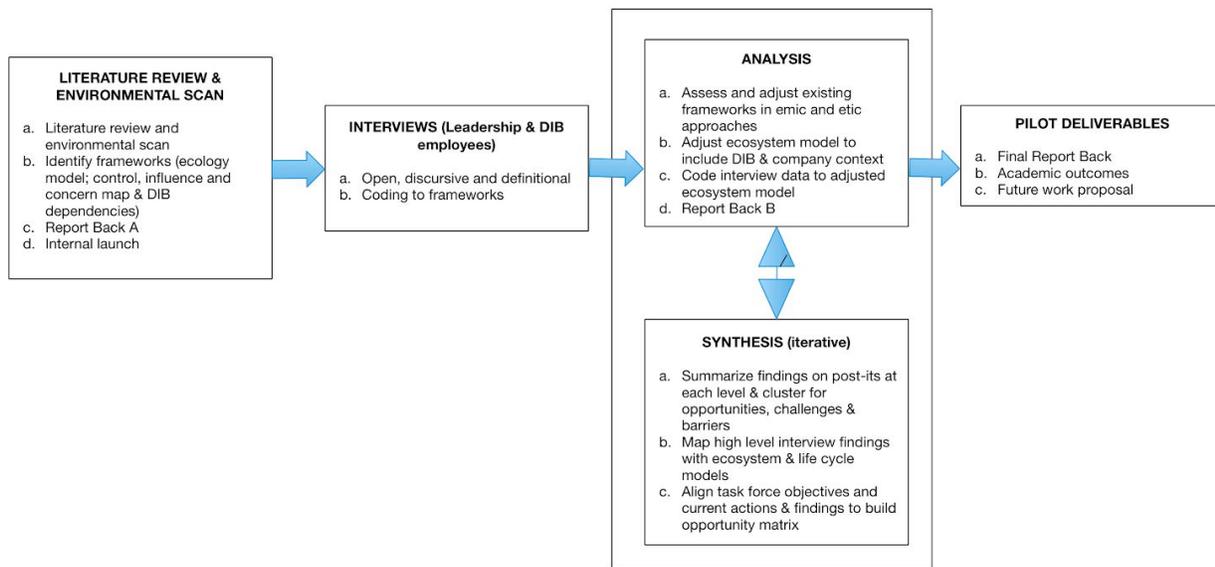


Figure 1: Research Pilot Process

The pilot stage of *In Situ* ran over the course of eight months in 2018. The research was designed to run across five major phases: a literature review and environmental scan, interviews with leadership and DIB-identified² employees, iterative analysis and synthesis cycles and staged research delivery (see Figure 1: Research Pilot Process). Three reports were presented to the studio across this period to feedback our evolving findings to our research partners to help inform the startup of their DIB activities. The insights from our ongoing research process provided context to the primary research question: “What are the factors that create an environment and culture of diversity, inclusivity and belonging (DIB) for game developers who identify as women?” and informed the development of the task forces and programmatic initiatives at the studio. The pilot iterated through analysis and synthesis stages in order to generate specific models, principles and action items from our research for our partner to offer durational approaches for ongoing work.

To make sense of the complex nature of DIB, conceptual models helped us to create shared meanings and understandings within an abstract framework. Successful models are able to frame problems, or challenge areas, from a systems perspective and should be useful in thinking through points of interventions for today and into the future. In short, the models are ‘tools to think with’. We have developed a set of interlocking models with this aim. These models help us understand the experience of DIB at this studio at this time and to develop actions for change within the context of the studio, and it’s corporate structure moving forward. Findings included an abstract model, to provide a systems perspective, plus key issues within DIB facing the studio today, demanding action on DIB from the employee base at present. These issues were mapped against the ecology model to note actions being taken and further actions that should be taken for a robust strategy.

The collaborative nature of this research is central to its goals. Partnerships of this nature enable participatory action research (PAR) (Freire 2005) in which the intent is to effect change in the context of

often complex challenges by shifting traditional power dynamics and involving research subjects in the co-design of possible solutions. A central objective of this partnership is to support the launch of a series of sustainable bottom-up DIB initiatives that are well informed, understood, and embedded within existing corporate structures, practices and people. Some challenges of running a parallel study to inform and research the launch and deployment of DIB work can be seen in terms of reporting findings in a manner usable for the studio in forming ongoing plans. A future secondary phase of the project will co-develop and evaluate the efficacy and impact of the task force programs through ongoing developmental evaluation.

Literature Review and Environmental Scan

Our literature review was organized across a survey of academic sources, mostly feminist games studies, methods for rapid ethnographies and feminist action research. This study brought multiple fields together in service of a pragmatic approach to the goals of the research. Broadly framed under a feminist design research approach *In Situ* used rapid ethnographic methods in a participatory context to focus on supporting the launch with research findings.

An emerging area of games research, that of studio studies, turns its attention to the working culture of game development processes and practices. Research from Whitson (2018, 2018), Consalvo (2008) and Kerr (2010, 2013, 2017), amongst others, investigate the conditions and contexts of game making at particular times and locations. This material turn to researching the lived experience of those making games serves to explicate the complexities of these practices in situated contexts, which in turn troubles an often oversimplified notion of the conditions of labour in this increasingly impactful industry. At the same time as this work is developing, feminist games scholarship is maturing with edited collections like “Feminism in Play” (2018) expanding the reach of feminist approaches to gaming culture. In this collection, as one example Weststar and Legault (2018) explore career pipelines for women in game development, offering a rich description of the challenges evident in the contemporary game industry. It is in the context of this emerging area of focus for game studies that this paper contributes a feminist design research pilot study embedded within a major game development studio in Canada. Our intent here is to discuss how we designed our participatory research and the ways in which we used a series of design research methods to study and support a diversity initiative of this nature.

It should be noted that ethnographic practices were not always open to change agendas, in the pragmatic and transformational sense. In fact, ethnographic practices, largely embodied by anthropologists, often situated participants in their studies as ‘subjects’ and, often, obscured the lives of women. In the mid-70s this changed, and a feminist ethnography with a moral, normative agenda took root, it not only sought to raise the everyday lives of women to consciousness and visibility, but also to actively create social change. This led the way to PAR, an acknowledgment that researchers may need to work with communities as an active agent of change, and FAR, a feminist approach in which embedded researchers work to create social change towards establishing equitable treatment of gender as well as other intersectional factors.

Gatenby and Humphries (2000) identify connections between participatory action research (PAR) and feminist research that align to the goals of our project around "...aiming for involvement, activism and social critique for the purpose of liberatory change." (Gatenby and Humphries, 89). They then move on to describe feminism as a perspective, a viewpoint, that implies a self-reflexivity in terms of the researcher's positionality in the research over and above any one particular set of research methods. Further, the goal of feminist action research (FAR) is to empower research collaborators via multiple methods that "...allow a variety of voices to be heard and a variety of issues to be worked with." (Gatenby and Humphries, 95) Here it is perhaps useful to distinguish between methods, as specific procedures and methodologies, as providing "conceptual, theoretical, and ethical perspectives on..." research. (Harrison, 25)

A feminist methodology clues us in on which combination of methods is likely to be most suitable for meeting the pragmatic and ethical objectives of a feminist research project. (Harrison, 2007)

Pragmatically, *In Situ* studied and informed the launch of internal task forces charged with working towards studio goals for DIB. The research findings are drawn from a range of methods; some from desk work, others from field work, and fed back to the studio via a series of reports and meetings. Ethically, *In Situ* is committed, indeed obliged via institutional ethics, to ensure the confidentiality of the interviewees and to maintain a sensitivity towards the studio's goals of building a successful context for DIB, especially given the wider environment of toxic behaviour evident in game culture more generally (Cross 2017; Gray, Buyukozturk & Hill 2017).

Reid's (2004) discussion of FAR frameworks identified the need to query the membership of the research group (e.g. Who is project for? Who is involved?), organizational structure and group make-up (What is the influence of different stakeholders?), dominant processes and values, critical events and conflicts, broader context and environment and temporality (Reid, 8). *In Situ* engaged directly with staff from the Human Resources and Communications teams at the studio via meetings on site and the interviews were carried out across a wide spectrum of job families. Importantly, *In Situ* started at the same time as the launch of the DIB initiative and benefited from the planning that had been carried out by the studio pre-launch. The support of studio leadership in implementing and sustaining an effective approach to DIB created the possibility for a research collaboration of this nature, particularly important in this increasingly toxic culture.

We used our literature review to substantiate the business case for diversity via a series of industry reports that argue for the positive impact of successful diversity initiatives on profitability, innovation, team smartness and talent retention (Dobbin et al 2014; Hewlett et al. 2013; Hunt et al. 2014; Hunt et al. 2018; Mayer et al. 2017; Phillips 2014; Phillips 2017). We know that more diverse working groups produce better results.

For the environmental scan, we looked at industry reports on diversity and innovation, and selected case studies of related organizations. Environmental Scans (ESs) are a research method that was originally used in a business context for retrieving and organizing data for decision making (Choo 1999). The results are then often used in forming goals and strategies. ESs may have multiple sources of data, focus on a

variety of subjects, and include different types of knowledge. Our environmental scan looked to proximate companies as sites of learning: we selected Riot Games, Microsoft Xbox and Intel to see how gaming and technology companies were approaching diversity initiatives in 2018. This information was gathered from the public domain, from websites and material in the public record. This is important for a few reasons, partly as this is how companies become known to future potential employees as champions for better working conditions and, partly as public visibility is often how game companies become subject to targeted attacks from individuals and groups who oppose DIB work. Diversity initiatives are often driven from within the Human Resources (HR) department at companies, with the support of upper management and the executive team. Many companies create a role for a diversity manager, which is an approach taken by Riot who also have a Diversity and Inclusion section on their website³ that clearly communicates their goals, plans and a roadmap for how they will proceed. Interestingly Riot Games have been studying toxicity in *League of Legends* (Riot Games 2009) with the intent of applying learning from gamer behaviour in-game to team dynamics within their organization. Microsoft Xbox have been very active around diversity with their “Gaming for Everyone” initiative⁴ positioned as an industry professional network that aggregates DIB resources online and at conferences like the annual Game Developers Conference. As part of a larger corporation, Xbox has the resources to support a range of DIB activities; from ERGs (Employee Resource Groups) to training to flexible working to incentivized diversity hiring goals. Intel has also committed significant resources to diversity initiatives tied to four pillars of accountability, transparency, data-driven and holistic approaches. Intel both funds external groups and have committed to releasing an annual D&I⁵ report to track numbers and progress.

This desk research yielded a series of frameworks (Ferdman & Deane 2013) and benchmarks that we used throughout the pilot to help conceptualize some of the complexity inherent to DIB work. Diversity, inclusion and belonging operate at multiple levels and involve individuals, groups, organizations and society in multiple ways. It is important to acknowledge these complexities and to state that investment into building a more diverse and inclusive game industry should be seen as complex, ongoing and systematic. Practicing DIB is an evolving process because inclusion and belonging are created, and re-created continuously. Implementing DIB is a reflexive and ongoing process as organizations and employees continuously align on how diversity, inclusion and belonging are understood, embodied, and practiced.

Interviews and Fieldwork

After the reporting of the pilot’s initial environmental scan we moved on to a series of ethnographic in-depth and in-context interviews at the studio. This included five interviews with senior leadership and twelve interviews with pre-selected potential task force candidates, who can be seen as DIB-invested individuals. Our initial pool of potential employee research participants had indicated interest in the study through a survey sent to employees for participation in DIB task forces. The selection process endeavoured to maximize for diversity of age, ethnicity, gender identity, sexual orientation, industry experience, and role.

A qualitative research method employed in the study was rapid corporate ethnography, a tool from cultural anthropology recognized at companies like Microsoft, IBM, Google and Intel as a way to uncover

patterns of behavior and mine insights through observation around how people act, talk and sense-make within their everyday environments (Ladner 2014, Jordan 2009, Wasson 2000). Two embedded design researchers studied the organizational culture of the studio through field research and immersive observation: namely through in-depth interviews, DIB task force meetings and office tours with staff and leadership who identify as champions of diversity and inclusivity in the organization. Using rapid ethnography techniques (Millen 2000), the embedded researchers sought to understand the cultural conditions, barriers and enablers to the diversity and inclusion within the organization. Interview questions oriented around the participants' understanding of diversity and inclusion both in the sector and their studio. DIB is an evolving concept (Kreitz 2008, Aperia Global 2015). It is both specific, as it is based on the individual experience, and contextual, as it is influenced by societal constructs. During our interviews we asked participants what the terms diversity, inclusion and belonging meant to them to better understand the expectations of DIB in the context of the studio. We asked our DIB-invested group to identify the greatest challenges to a culture of DIB and to look ahead to the most exciting opportunities around contributing to a culture of DIB in the gaming sector.

How advocates think of DIB

Starting with DIB advocates is an important aspect of our feminist approach, placing part of our initial study with employees already invested in DIB work enabled the research group to access a situated expertise that made explicit potential priorities for the task forces. Our pilot spent time exploring the interconnectedness of issues of diversity, inclusivity and belonging and our first model offers a visualization of these connections:

DIB Overall

- A difficult but worthy goal, with shifting mindsets the key to success.
- Focus on issues of intersectionality; DIB is not just about one thing, it is an awareness of many intersecting differences.
- Take visible actions and commit to a long-term vision; DIB isn't just dialogue, it needs to be seen.

Diversity is:

- A wide-array of people with different skills and expertise represented in the studio and in the company.
- Acknowledging perspectives of people with different backgrounds, cultures, and ways of being.
- A powerful force for corporate relevance and market leadership; essential to a business.
- Measured by quantitative approaches: it gives us a snapshot of how diverse a group is and how much has changed.

Inclusion is:

- Promotion of diversity and representation among leadership and decision makers.
- Transparency in decision making and processes.
- Embracing difference and the possibilities that affords the team, the studio, and the company.
- The central place of action: it is how we bring diverse personnel and experiences in and how we attempt to foster belonging. It can be measured by quantitative, semi-quant, and qualitative means.

Belonging is:

- Teams: Feeling able to speak freely and voice dissent or advocacy for ideas and that contributions from all members are heard, valued and integrated.
- Game content and play experience: Producing work that embodies diversity authentically, where a wide range of players could relate to the situations, characteristics, and avatars without feeling stereotyped or demeaned.
- Experiential and can only be measured effectively by qualitative approaches.

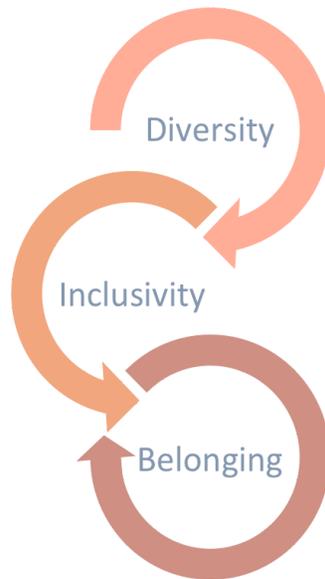


Figure 2: Inclusive practices link Diversity to Belonging

Diversity alone can prove troublesome, an ‘add diversity and stir’ model is often ineffective in the long run without creating processes to provide an inclusive environment (both structurally and culturally). Diversity alone can demand assimilation, where uniqueness is suppressed (Brewer 2011; Shore et al 2011). A diversity of perspectives and experiences must be welcomed into inclusive structures and procedures, including interpersonal interactions. Organizations must change cultural practices and behaviors, through policies and expected actions to ensure that the individuals feel belonging. Once a diverse group has been established, inclusive structures and routines need to be sustained in order for individuals to feel welcomed. In this way, when we modelled the relationships between diversity, inclusion, and belonging (as shown above), we saw that inclusive practices link diversity to belonging. If individuals do not experience belonging, the outcome can be mere ‘differentiation’ – i.e. the ghettoization of groups into specific roles. Belonging is the experience and outcome of well functioning inclusive practices. When people feel as though they belong, they are secure, loyal and take care of their organization’s health. Belonging without diversity can be established. For example, small homogenous groups of young, white men creating startups in Silicon Valley is a case in point, each individual’s uniqueness is valued but the diversity of the group is narrowly established. Once diversity that is reflective of larger social variation in identity and experience is embraced, inclusive practices become critical.

Mapping interview findings

When we examined interview findings we found that leadership and task force candidates were on the same page on issues around DIB at the studio with valuable perspectives offered from their different vantage points (see Figure 3: Mapping the findings). Whilst not surprising given the DIB advocacy evident in the group interviewed, it was noteworthy to see how aligned leadership and employee perspectives were.

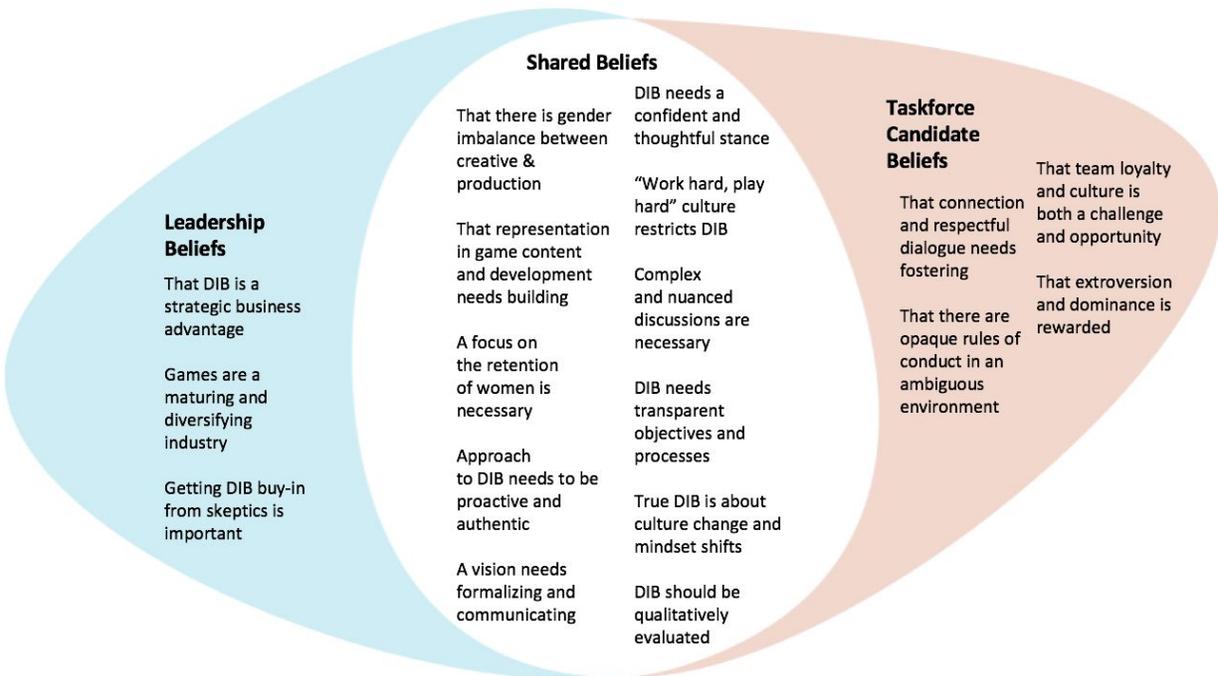


Figure 3: Mapping the findings

Design Research: Analysis and Synthesis

Dubberly et al. (2010) describe the design research process as divisible into two phases; that of analysis and synthesis that enable a move from problem to solution through the use of abstracted models. Analysis looks to describe the current situation to understand needs whilst synthesis pulls together research data to propose a preferred future. Synthesis involves taking the data derived from research methods and combining them into new insights and sense-making models. Importantly Dubberly et al.'s paper points to a "bridge model" that frames a design process as moving from describing what "is" to imagine what "could be". This is done via a process of abstraction aimed at enabling the designer to 'play' with relevant models in their exploration of alternatives. Analysis and synthesis can be seen as an iterative set of processes that move from identification of issues to potential responses via modelling techniques. In this pilot our team pulled together data from the first two stages of our process to allow for thematic coding to both established and emerging themes to facilitate team sense-making. Findings were clustered to identify attributes, opportunities, challenges and barriers that were then framed within the ecosystem model that was built from our literature review (see Figure 4: The *In Situ* Integrated DIB Model).

Viewing DIB as a system: model making

Kumar's (2013) process of model making for driving innovation starts with a recognition of the domain and the need for action. Formal inquiry (research) into the context and experiences aims to create insights through abstraction (concepts for action). The models are formalized and explored for comprehensiveness and utility in the synthesis phase, from where actions, strategies or other offerings - to create a positive and impactful change - are realized. Kumar further states that although there are distinct phases, model making is a non-linear and iterative process. It fits into design thinking processes where explorations of concept and field overlap. The model is refined and assessed during different points of engagement in efforts made towards addressing DIB. In our identified themes, for example, we went back to the overarching model to further understand them within the framing of DIB and its environment for potential actions. Similarly after listening in task force sessions we went back to refine our insights and to organize actions. At each stage of our research, we cycled through the phases of information collection, understanding, conceptualizing and articulating actions within the framework. Model making moves between understanding the experience of the real world and to abstraction, for change in the real world. In applied design research we aim to understand with an agenda of change. This demands the modeling of what is (current) in order to think through what can be (future).

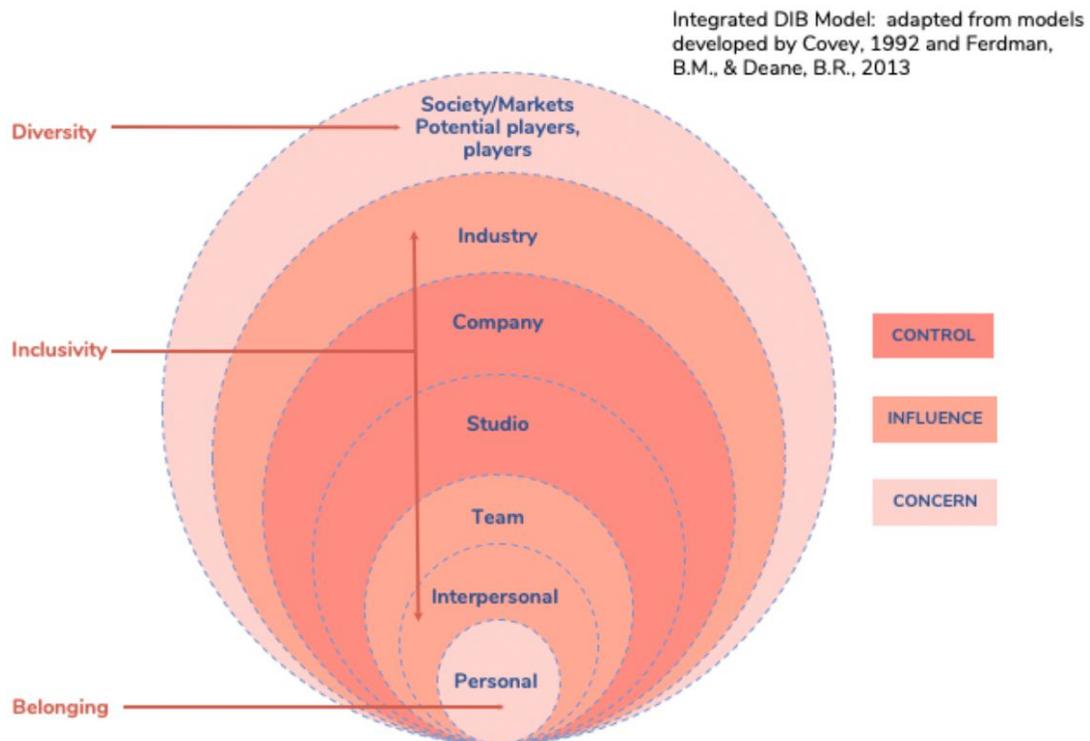


Figure 4: The *In Situ* Integrated DIB Model

Our Integrated DIB model (shown above) was created by overlaying the following:

- Model of relationships between diversity, inclusion and belonging.
- Adapted ecological framework of inclusion (Ferdman & Deane 2013)
- Control, influence and concern map of the ecology (Covey 1992)

The Integrated DIB model offers a framework that the studio can use as a strategic tool to:

- Understand where current initiatives are being focused;
- Plan future DIB efforts, and;
- Inform the evaluation of DIB activities.

Modelling interview findings

In compliance with our research ethics clearance we analyzed interview findings in order to ensure confidentiality and analyzed participant responses through the *In Situ Integrated DIB Model* we created in our analysis stage (see Figure 4). Diversity, inclusion and belonging operate at multiple levels for employees of the studio. Research participants spoke about their experiences of DIB, which we synthesized into the different ecological levels. This involved sorting responses across personal, interpersonal, team, studio, company, industry and society levels as follows:

- **Personal**

- Belonging occurs at the personal level: the experience of belonging is feeling safety, comfort and confidence; empowerment and agency, feeling like they are part of the change and can be part of the impact.
- At an intersection of different identities: Belonging is different for every person and is at the complex intersection of the different identities one associates with or is associated with.
- Impacted by lived experience: People bring in their own lived experience, which may include past traumas for marginalized groups, or internalized toxic behaviours for others with lack of exposure.
- Difficulty assessing someone's personal feeling or lived experience: The feeling and experience of belonging is highly personal and depend on a complex intersection of factors at multiple levels of identities. The studio should actively seek out this information in order to appreciate the individual needs and experiences around belonging that are situational and context-specific.

- **Interpersonal**

- The power of an individual: The greatest feeling of inclusion and belonging is brought about by the interactions between individuals.
- Unconscious/implicit bias impacts these interactions: For example, the assumption, "I was able to do it, so others can too" is an unconscious bias that many people hold. It limits the ability for many to understand how women and people from marginalized communities may not have had equal access to opportunities.

- **Team**

- Teams are key to a feeling of belonging: When teams are formed, they are formed with a view towards the long-term. One's team is who you will spend months if not years with.
- The culture of the team will directly impact the sense of belonging of each member and team leaders' support provides a higher sense of inclusion and belonging. The trust that team leaders provide help team members feel that they are valued and able to have an impact. Their direct support allows employees to have an easier path in their career progression.

- **Studio**

- The studio is a mirror of the audience: As audiences expand, the need to reflect that diversity is felt in hiring practices, but this is not an easy shift.
- The city is an enabler: Toronto has played a key part in many employees' decision in relocating to this specific studio as diversity is a part of the city's identity and was felt to be reflected within the studio.
- When leaders support DIB this cascades down to the rest of the company, the values and behaviours of leaders and managers model the expectations for all employees. Confidence and support from management helps employees feel valued and successful management can be seen in goals and vision that are specific, clear, transparent, and honest. When rooted in authenticity, fostering DIB is much more effective than just creating policy and guidelines.
- The limits of informal processes: For the most part, DIB initiatives have been undertaken informally at the studio level but leaders feel that they have reached the point where they must implement more formal mechanisms.

- **Company**

- The company is in a position of strength: People wait years to get a chance to work at the studio. The company's strong reputation as a leader in the industry is a solid position to help the industry move forward towards DIB.
- Approaching DIB on multiple levels: The company is considering DIB at multiple levels, from local studios to a team at HQ that is tasked with spearheading DIB globally. This buy-in from leadership at all levels is an important signal to all employees.
- Existing culture of ownership: The culture of the studio as a company is to be bottom up. This sense of agency helps employees feel that they can be heard and enact change.

- **Industry**

- The industry is going through a process of maturation: The industry is now older and many developers are in a different stage of their lives. An industry-wide mindset shift is necessary to allow for DIB to flourish.
- Parallel trajectories in other industries: While the gaming sector is still relatively young in comparison with other industries, it was felt that there is a strong connection between the video game industry and the film and tech sectors. Both of these arenas are currently in

crisis, with movements like #MeToo and #OscarsSoWhite sparking activism and needful change.

- **Society (potential market)**

- Are games for everyone? Video games audiences have shifted. Emerging markets are providing opportunities to expand the reach of the games industry. This trend is prompting game developers to reconsider how game content can enable audiences to feel that games are for them.

Challenges and opportunities across six high-level themes

In this section we outline six themes that emerged from the pilot, offering a framework for the focus for DIB in the studio. These themes emerged from sense-making, analysing, and synthesizing the current experiences of leadership and employees and as such are a snapshot in time. As new initiatives are launched, as the studio progresses its efforts in DIB over time, and as society itself evolves, these themes will change and new challenges will emerge.

In each theme, we presented context-specific barriers and challenges around DIB⁶ that emerged from the research as well as related opportunities that can address these challenges. The purpose of this work was to see how the insights from the research participants can lead to and inform specific actions. These themes present opportunity areas around DIB. Within each theme, relevant insights that emerged from the interviews with employees and leadership were presented across the ecological framework. These insights are shared to provide context to the potential barriers and enablers to diversity, inclusion and belonging as seen through the eyes of the interview participants. The modified ecological framework of personal, interpersonal, team, studio, company, industry and society also reveal how the experience of DIB is systematic, dynamic and multi-faceted and is impacted by different environmental factors across different spheres both within and outside of the studio's control and influence.

The *In Situ* Pilot ran in parallel to the formal 2018 launch of the studio's DIB initiative and our research builds from this existing and ongoing work to study, support and suggest additional opportunities to leverage in continuing efforts to foster DIB. These opportunities offer intervention areas that have been synthesized from recommendations shared by interview participants, task force members, and a broader literature review and survey of best practices around DIB.

High level themes

We took our findings and articulated six themes that outline present challenges and opportunity areas. These offer actions that the studio can implement to meet current challenges.

The power of formalization

Research participants felt that the studio is doing a lot right in terms of DIB. They recognized that as a company, advocating for DIB is an ongoing process that needs continual support and resources. Going forward, people interviewed wanted more formal processes around DIB initiatives. There is enthusiasm for the studio to lead through an articulation of a strong and authentic vision statement framed through

specific objectives, upheld through policies to keep people accountable to behaviours, while recognizing that DIB, as an ideal, changes over time.

Innovating the pipeline

Interviewees were interested in finding ways to innovate on increasing representation in the talent pipeline through short and long term internal measures, such as creating more opportunities for current employees for career mobility between different job families and advocating for better representation in games development aimed at building a more representative talent pipeline. Challenges surrounding the talent pipeline are truly multi-dimensional and interconnected. Significant levers of change include focusing on retention, supporting women to move from production to creative roles, and reassessing how headhunters and referrals fit into more inclusive hiring practices.

Reframing how we work and play

Those interviewed discussed a ‘work hard play hard’ culture prevalent in the gaming sector that reinforces expectations around long work hours and overtime while celebrating job perks around partying and drinking. While a game development culture that emphasizes team loyalty is important, there were contrasting experiences shared by interview participants that revealed how teams can amplify both positive and problematic work conditions.

Trust comes from accountability

Most research participants believe that the most critical factor to the success of DIB is an environment of trust. Trust can be fostered through maintaining transparency around the studio’s values, objectives and processes regarding DIB, and in showing commitment to staying accountable to these processes. Interviewees believe that this leads to an adoption of DIB that feels true and authentic. Employees felt that commitment and accountability to DIB means that it is practiced consistently across all channels and in every context.

Leading the industry

There is a strong consensus among the interviewees that diversity should be seen as a strength in making better games. In spite of differing beliefs, people in the gaming industry can unanimously agree on the shared priority of needing to hire the ‘best talent’ to developing the ‘best games’. Interviewees are aware that the mainstreaming of gaming and its increased impact is forcing the conditions for the industry to diversify and mature. With strong representation of women in leadership and an inclusive culture, the studio is in a powerful position to have a strong stance on DIB and take leadership in showcasing the value of DIB as a competitive edge in the global gaming market.

True impact in DIB cannot just be ‘seen’

Those interviewed felt that true change around DIB needs to occur and that this requires continuous commitment and is often challenging long-term work. This kind of change cannot just be seen and evaluated in numbers, but must happen through culture and mindset shifts and requires understanding how the lived experience of the studio’s employees’ evolve. True change in DIB takes time and is far more difficult to measure. Many interviewees are optimistic that this can take place by creating the conditions for respectful dialogue, education and shared connection.

Whilst these themes come from a specific place and time the discussion above remains generalizable, and as such offers salient points for other game developers.

Deliverables

The pilot study delivered findings via a series of reports, presenting the research insights, recommendations and principles for DIB that had been gathered through an in-depth iterative synthesis process drawn from design research methods. We identified opportunities and interventions the studio could utilize to drive ongoing DIB initiatives. The researchers devised integrated and layered conceptual models to think through other actions that might be taken today and into tomorrow. These provide a guide to identify areas of action through a holistic and systemic approach.

In our first report back to the studio the OCAD University team synthesized data from academic and industry-specific sources such as journals, reports, and organizational websites. As this was the first phase of the contextual inquiry, we focused on existing literature in subjects such as current practices in diversity, inclusion and belonging, trends in the gaming industry, and the business case for diversity. We reviewed existing global diversity and inclusion frameworks as well as case studies from other game and technology companies. As this was the first time the studio had engaged in FAR of this nature, this early report was important in establishing the ways in which our research could provide expertise to and support the studio's ongoing process around DIB. As we arrived to the initiative, significant work had been done at the studio to create a rationale and plan for DIB using task forces⁷, we aligned through shared definitions of diversity, inclusion and belonging.

Our second report presented initial findings from our fieldwork, this involved identifying some potential frameworks for analysis (that were later developed into models via synthesis) and the high level themes presented above. This report informed the kick-off meetings of all four task forces and provided abstracted feedback as to where the studio was at in Fall 2018 in terms of looking to frame focus areas.

Our final report presented the results of our entire pilot including the models that had grown out of our analysis and synthesis stages. We shared synthesized opportunities, together with sources and placed across our ecological model. We offered specific recommendations, from guiding principles for ongoing work to specific action items for each task force. These opportunities are context and time-specific, a snapshot of where the studio is in 2018. Looking to longevity our recommendations included guiding principles as a way to anchor the work over time, these included evaluating efficacy through people's experience as well as quantitative changes and emphasized the need to train and educate around DIB in an experiential manner. Both these guiding principles and the model are a way to systematically consider future challenges and issues. While the six themes identified are a deep dive into the current state of DIB and therefore will change over the course of time, the model and the guiding principles will remain evergreen. We emphasized the importance of using task forces as a mechanism for change through co-ownership with employees. The report finishes by suggesting approaches to evaluation and next steps.

CONCLUSION

This feminist action research project encompassed four phases of research: 1) an environmental scan and literature review, 2) ethnographic fieldwork: interviews and observation, 3) analysis and synthesis and, 4) task force participatory observation and conceptual tool delivery. Use of these methods helped us build an integrated model of DIB that can be used as a strategic tool to direct the focus of ongoing DIB initiatives and evaluation efforts.

Our pilot showed how diversity, inclusion and belonging are interconnected and can be understood through an ecological framework as one way to describe the multi-dimensional nature of the work situated in a large game development studio. Our research showed how DIB is currently understood by leadership and employee participants at a studio firmly committed to diversity work. We mapped our findings and insights into areas of high impact intervention, presenting both barriers and challenges and related opportunities for both the task forces and the studio moving forward. We are honoured that this work will continue, moving into a study of the four task forces as DIB activities impact the studio and beyond, in order to further support and develop evaluation frames for this ongoing research.

ENDNOTES

- ¹. DIB stands for Diversity, Inclusion and Belonging, a term that acknowledges the centrality of connecting diversity goals through an inclusive environment that generates a sense of belonging.
- ². <http://www.refig.ca>
- ³. <https://www.riotgames.com/en/work-with-us/diversity-and-inclusion>
- ⁴. <https://www.xbox.com/en-US/developers/gaming-for-everyone/about-us>
- ⁵. Diversity and Inclusion
- ⁶. Not shared here.
- ⁷. The studio launched their DIB initiative within the studio in May 2018, their launch included DIB definitions, objectives and key deliverables.

BIBLIOGRAPHY

- Aperian Global. 2015. Leaders in Diversity and Inclusion: 5 Lessons From Top Global Companies. Retrieved from: <http://www.aperianglobal.com/leaders-diversity-inclusion-5-lessons-top-global-companies/>
- Brewer, M. B. 1991. "The social self: On being the same and different at the same time." *Personality & Social Psychology Bulletin*, 17(5), pp. 475–482.
- Buchanan, R. 1992. "Wicked Problems in Design Thinking". *Design Issues*, Vol. 8, No. 2 (Spring, 1992), pp. 5-21. The MIT Press. <http://www.jstor.org/stable/1511637>
- Choo, C.W. 1999. "The Art of Environmental Scanning". *Bulletin of the American Association of Information sciences*. February/March.
- Collins, P.H. and Bilge, S., 2016. *Intersectionality*. John Wiley & Sons.
- Consalvo, M., 2008. "Crunched by passion: Women game developers and workplace challenges". *Beyond Barbie and Mortal Kombat: New perspectives on gender and gaming*, pp.177-191. Cambridge, MA. MIT Press.

- Covey, S. 1992. *Principle Centered Leadership*. London. Simon and Schuster.
- Crenshaw, K., 1990. "Mapping the margins: Intersectionality, identity politics, and violence against women of color". *Stan. L. Rev.*, 43, p.1241.
- Creswell, J. and Creswell J.D. 2018. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage publications. Fifth edition.
- Cross, K., 2017. "Press F to revolt" In *Diversifying Barbie and Mortal Kombat: Intersectional perspectives and inclusive designs in gaming*, edited by Y. B. Kafai, G. T. Richard & B. M. Tynes. Lulu.com. pp.23-34.
- Dobbin, F, and Kalev, A. 2014 .“Why Firms Need Diversity Managers and Task Forces”. Pp. 170-198 in *How Global Migration Changes the Workforce Diversity Equation*, edited by M. Pilati, H. Sheikh, C. Tilly, and F. Sperotti. Newcastle: Cambridge Scholars Publishing.
- Dubberly, H., Evenson, S., & Robinson, RE. 2010. "On modeling: The Analysis-Synthesis Bridge Model." *interactions* 15, no. 2. pp. 57-61.
- Ferdman, B.M., & Deane, B.R. 2013. *Diversity at Work: The Practice of Inclusion*. Jossey-Bass.
- Freire, P. 2005. *Pedagogy of the oppressed*. New York, USA. Continuum International Publishing Group.
- Gatenby, B. and Humphries, M. 2000. "Feminist participatory action research: Methodological and ethical issues." In *Women's Studies International Forum*, vol. 23, no. 1, pp. 89-105. Pergamon.
- Gray, K. L., Buyukozturk, B., & Hill, Z. G. 2017. "Blurring the boundaries: Using Gamergate to examine "real" and symbolic violence against women in contemporary gaming culture." *Sociology Compass*, 11(3), e12458.
- Harrison, F. 2007. "Feminist methodology as a tool for ethnographic inquiry on globalization." In *The gender of globalization: women navigating cultural and economic marginalities*. pp. 23-31.
- Hewlett, S.A., Marshall, M., Sherbin, L. and Gonsalves, T., 2013. *Innovation, diversity and market growth*. Center for Talent Innovation.
- Hunt, V., Prince, S., Dixon-Fyle, S. and Yee, L., 2018. "Delivering through diversity". *McKinsey & Company Report*. Retrieved April, 3, p.2018.
- Hunt, V., Layton, D. and Prince, S., 2014. "Diversity matters". *McKinsey & Company*, London and Atlanta, available at: http://www.mckinsey.com/insights/organization/why_diversity_matters (accessed March 10, 2015).
- Jordan, B. 2009. "Working in corporate jungles: Reflections on ethnographic praxis in industry". *Ethnography and the Corporate Encounter*, Melissa Cefkin, Ed. Bregahn Books
- Kerr, A. 2017. *Global Games: Production, Circulation and Policy in the Networked Era*. 10.4324/9780203704028.
- Kerr, A., 2013. "Space wars: The politics of games production in Europe". In *Gaming globally* (pp. 215-231). Palgrave Macmillan, New York.
- Kerr, A. 2010. "The Culture of Gamework". In Mark Deuze (Ed) *Managing Media Work*. London: Sage.
- Kolko, J. 2010. "Abductive Thinking and Sensemaking: The Drivers of Design Synthesis". In MIT's *Design Issues* Volume 26, Number 1 Winter 2010.

- Kreitz, P.A., 2008. "Best practices for managing organizational diversity". *The Journal of Academic Librarianship*, 34(2), Pp.101-120.
- Kumar, V. 2013. *101 Design Methods: A Structured Approach for Driving Innovation in Your Organization*. Wiley.
- Ladner, S. 2014. *Practical ethnography: A guide to doing ethnography in the private sector*. Left Coast Press.
- Mayer, R.C., Warr, R.S. and Zhao, J. 2017. "Do Pro-Diversity Policies Improve Corporate Innovation?". *Financial Management*, 47(3), pp. 617-650. <https://doi.org/10.1111/fima.12205>
- Millen, D.R. 2000. "Rapid Ethnography: Time Deepening Strategies for HCI Field Research". In: *Proceedings of DIS 2000*, Pp. 280-286.
- Phillips, K.W. 2017. "COMMENTARY: What is the real value of diversity in organizations? Questioning our assumptions" In Scott E Page. *The Diversity Bonus: How Great Teams Pay Off in the Knowledge Economy*, Princeton University Press. p.223.
- Phillips, K.W., Medin, D., Lee, C.D., Bang, M., Bishop, S. and Lee, D.N., 2014. "How diversity works". *Scientific American*, 311(4), pp.42-47.
- Riot Games. 2009. League of Legends. [PC], Riot Games, Santa Monica, California, United States.
- Reid, C. 2004. "Advancing women's social justice agendas: A feminist action research framework." In *International journal of qualitative methods* 3, no. 3, pp. 1-15.
- Sanders, L and Stappers, P-J. 2012. *Convivial Toolbox: Generative Research for the Front End of Design*. Amsterdam: BIS.
- Shore, Randel, Chung. Dean, Ehrhart, and Singh. 2011 "Inclusion and Diversity in Work Groups." *Journal of Management Vol. 37 No. 4, pp. 1262-1289*
- Wasson, C. 2000. "Ethnography in the Field of Design". *Human Organization* 59 (4): pp. 377-388.
- Weststar, J, and, Legault M-J. 2018 "Women's Experiences on the Path to a Career in Game Development." In *Feminism in Play*, pp. 105-123. Cham, Palgrave Macmillan.
- Whitson, J. R. 2018. "Voodoo Software and Boundary Objects in Game Development: How Developers Collaborate and Conflict with Game Engines and Art Tools." *New Media & Society* 20, no. 7 (July 2018): 2315–32. doi:10.1177/1461444817715020.
- Whitson, J. R. 2018. "What Can We Learn From Studio Studies Ethnographies? A "Messy" Account of Game Development Materiality, Learning, and Expertise". *Games and Culture*. <https://doi.org/10.1177/1555412018783320>.