

Appendix B: Kelowna Parks Plan Trends Report

Introduction

Understanding recreational and park access trends within Kelowna and across Canada is essential to effective parks planning. Parks planning must be able to respond to changing demand to create park spaces that people can access and will use both now and in the future. This background report provides an overview of Kelowna's demographics, parks trends during the COVID-19 pandemic, broader park trends, volunteering trends, and amenity provision trends. A comparison to parks and park infrastructure in other B.C. municipalities is also provided to offer context for parks planning in Kelowna.



Demographics

The demographic profile of Kelowna provides insights about the community's present and future recreation needs. Demographics can help estimate who park users are and the types of park experiences that they may need. Overall, demographic trends can focus the lens of parks services and programming.

Kelowna is one of the fastest growing cities in Canada, growing by 13.5% between 2016 and 2021. Kelowna has a slightly younger population (42.4 years) than the rest of the province (42.8 years) (Statistics Canada, 2022). However, there is a higher percentage of older adults aged 65 years and older in Kelowna (21.4%) than the rest of the province. This has several implications for park design and usage. Older adults generally have more time for leisure, recreation, and volunteering, which may mean more demand for senior specific programming and activities. Park design must also consider age-appropriate applications to ensure universal accessibility (mobility), comfort, and supportive facilities such as washrooms and frequent seating.

In addition to an aging population, Kelowna has a slightly smaller than average household size of 2.3 (Statistics Canada, 2022). Around a third of households in Kelowna

have children while 49% are couples without kids. This means that there are a variety of household types that will need to be considered when planning parks, such as adults living alone, students, families with and without children, and retirees. Parks will need to be able to serve people of all ages and stages of life and adapt as specific local demographics change, such as student age children growing up.

Kelowna is less racially and ethnically diverse than BC overall or Canada, but it is gradually becoming more diverse (Statistics Canada, 2017). In 2016, 9.5% of Kelowna's population identified as visible minorities compared to 22.3% in Canada and 30.3% in BC. Parks should be welcoming spaces for everyone. As the community becomes more diverse, it is essential to consider the different cultural needs and preferences of newcomers such as spaces to practice cultural activities and celebrations, specific sports, and different types of leisure. Diverse and inclusive parks should also ensure parks include Indigenous history, teachings and approach park building through a lens of reconciliation. Other important considerations are potential barriers to recreation or parks access, such as unfamiliarity with the climate, lack of specialized equipment, or language barriers.

Table 1: Kelowna Demographics Snapshot

POPULATION	<ul style="list-style-type: none"> • 144,567 (2021)) • 13.5% growth 	VISIBLE MINORITIES	<ul style="list-style-type: none"> • 9.5% of population (2016) • B.C.: 30.3% • Canada: 22.3%
MEDIAN INCOME	<ul style="list-style-type: none"> • \$34,352 (2016) • Higher than provincial and national median 	INDIGENOUS POPULATION	<ul style="list-style-type: none"> • 5.5% of population (2016) • B.C.: 5.9% • Canada: 4.9%
MEDIAN HOUSEHOLD INCOME	<ul style="list-style-type: none"> • \$68,627 (2016) • Lower than provincial and national median 	COMMON LANGUAGES	<ul style="list-style-type: none"> • English • French • German • Spanish • Punjabi • Tagalog • Italian • Mandarin • Russian • Dutch
MEDIAN AGE	<ul style="list-style-type: none"> • 42.4 (2021) • B.C.: 42.8 • Canada: 41.6 		
AVERAGE HOUSEHOLD SIZE	<ul style="list-style-type: none"> • 2.3 (2021) • B.C.: 2.4 		

Indigenous Peoples and Parks

The City of Kelowna, including all of its parks system, is located on the traditional, ancestral, and unceded lands of the syilx/Okanagan people. Indigenous peoples have historically been denied the ability to practice culture in public spaces and have been systematically removed from placemaking in favour of settler colonial narratives. Indigenous peoples today still face violence and discrimination in public spaces. Active partnerships and direct relationships with Indigenous communities and organizations will be essential to create inclusive spaces that respect Indigenous history, traditional uses, and contemporary cultural expression as well as foster truth and reconciliation between Indigenous and non-Indigenous peoples in the community.

Kelowna has a young and growing urban Indigenous population. Approximately 5.5% of the total population of Kelowna identified as Indigenous in the 2016 Census. This is slightly lower than the Indigenous population in BC at 5.9% but higher than the Indigenous population in Canada at 4.9%.

Research shows that Indigenous people face greater barriers to accessing and participating in recreation. Indigenous youth are less likely to participate in organized sports due to increased social, cultural, and economic barriers for their families (Department of Canadian Heritage, n.d.). These barriers can be overcome by working with Indigenous youth and families to improve access and create programming that caters to their needs.

The City of Kelowna is committed to actively engaging with Indigenous peoples and building a relationship of trust, understanding, and mutual benefit. Indigenous traditional practices will inform parks planning in the city. Indigenous history and traditional cultural practices will be particularly significant in informing the Parks Planning goal of stewardship and equity, as the syilx/Okanagan people have been stewards of this land since time immemorial.



COVID-19 Related Parks Trends

The COVID-19 pandemic has changed both how people use and value parks. One of these key changes is how parks are increasingly being recognized for their mental health benefits (Volenec et al., 2021). In a cross-Canada survey involving over 1600 participants, 70% said that their appreciation for parks space increased during the pandemic. Approximately 82% of participants said that parks have become more important to their mental health during COVID-19 (Park People, 2020).

Parks provide opportunities for physical activity and exposure to nature, both of which provide stress relief (National Recreation and Park Association, 2015; Penbrooke, 2020). This has been especially important during the pandemic, as stress levels and anxiety have been increasing since the onset of COVID-19 (Volenec et al., 2021).

Over half (55%) of the 51 Canadian municipalities surveyed in 2020 said that park visitation increased during the pandemic (Park People, 2020). This surge in park use came as people and families tried to find safe ways to socialize, engage with their children, and stay active (Volenec et al., 2021; Collins et al., 2020). There has also been an increase in demand for public spaces that allow people to walk and cycle safely, such as Quiet Street programs or closure of streets to cars for public use (Collins et al., 2020; Park People, 2020). Quiet Streets are corridors that prioritize non-motorized active transportation uses such as cycling and walking by putting up traffic barriers to slow down traffic (Kingston Coalition for Active Transportation, 2020). They are typically located on local streets where there is a desire for an active transportation route (Kingston Coalition for Active Transportation, 2020). Other cities, such as Vancouver, Toronto, and Kingston, have already implemented these programs during the pandemic.

The pandemic disproportionately affected marginalized communities, many of whom already lacked access to park space. This has raised awareness about the need to ensure equitable access to public spaces.

Homelessness

Homelessness presents both a challenge and an opportunity for parks planning. Parks are public spaces that should be open and accessible to everyone, regardless of income, background, or housing status. Inclusive park design can ensure that those experiencing homelessness have access to washroom facilities, drinking water, and shelter from the elements. Parks can also provide inclusive programming in coordination with social support agencies to help foster a sense of community, build physical literacy through recreation, and educate housed citizens on how to be compassionate towards those experiencing homelessness.

In Kelowna, there are at least 297 people experiencing homelessness, and this number is rising (Central Okanagan Foundation, 2020). Kelowna has a 5-year plan for ending homelessness called Journey Home. There is an opportunity to consider some of the Plan's direction in parks planning, such as collaborating on efforts to increase youth access to community and recreation, helping to reduce the criminalization of those experiencing homelessness in park spaces, and fostering truth and reconciliation in public space.

Tourism Trends

Tourism is an extremely valuable industry and is an essential part of Kelowna's economy, providing employment for approximately 12,970 people. The industry generated around \$2.1 billion in 2018/19 (Tourism Kelowna, 2021). The Okanagan area is one of the most popular tourism regions in the province. It attracts a number of visitors, with approximately 69% from other parts of B.C., 12.5% from Alberta, and about 10.4% from the United States. Some of the top reasons for visiting Kelowna are sightseeing, winery touring, and family vacations as well as water-based recreation beaches and outdoor activities (Tourism Kelowna, 2021). Parks play a key role in the tourism industry, providing visitors the opportunity to participate in desirable activities and shaping how tourists experience the city.

Cultural Heritage in Parks

Within parks, cultural heritage generally includes heritage features or heritage landscapes. The historical aspects of parks are increasingly being preserved and developed by municipalities. Incorporating cultural heritage into parks embeds the importance of the space into the parks while increasing user interest. Cultural heritage can be showcased through naming, interpretive information plaques, art, and culturally appropriate features that honour the heritage and spirit of the cultural practice. While continuing to include museums and educational opportunities, many cultural heritage spaces aim to foster discussion amongst users. Municipalities are also moving towards including festival venues, art displays, amphitheaters, and gardens to honour cultural heritage in parks (Strathcona County, 2019). Indigenous heritage is also increasingly being incorporated into parks and open spaces, through things such as monuments and museums, as well as through cultural experiences and incorporating Indigenous knowledge and traditional uses.

Within Kelowna, there are a number of heritage societies that are a part of preserving and celebrating Kelowna's unique history, including the Central Okanagan Heritage Society and the Okanagan Historical Society. These organizations help manage some of the heritage parks in the city, including Guisachan Heritage Park, Benvoulin Heritage Park, and Brent's Grist Mill Park. Kelowna also has a number of initiatives, including a cultural district, theatres, galleries, gardens, and museum celebrating the city's military history and wine-making heritage.

Placemaking and Identification

The Government of B.C. has a formal process for place naming, outlined in the Geographical Naming Policy and Procedures. Under this process, the government initiates an engagement period to get feedback from relevant local governments and Indigenous peoples.

Commemorative naming requires that there be broad demonstrated support of a significant contribution to the area by said person. The Government of B.C. has pushed towards incorporating more place names that reflect the cultural history and heritage values of a place and the province. To this end, there has been an increased effort to appropriately honour Indigenous traditional place names. This is being done through collaboration with Indigenous nations in order to correct previously anglicized names and recognize Indigenous names and naming conventions.

More information can be found at: <https://www2.gov.bc.ca/gov/content/governments/celebrating-british-columbia/historic-places/geographical-names>.

Urban River Restoration

Kelowna's 2040 OCP expresses a desire to protect and restore its waterbodies, especially Okanagan Lake. The OCP policy 10.4.7 states that parks and public spaces must be designed proactively to protect the waterfront from climatic events. Policy 10.4.8 states that a habitat-balance approach must be used when developing Okanagan Lake foreshore (avoid, mitigate, and compensate habitat impacts).

The OCP also includes policy to preserve other riparian areas and watercourses in their natural state, linking with upland areas to develop a connected network of natural areas throughout Kelowna. This is particularly important around urban areas, including the Downtown, where waterfront amenities and recreational use might harm the health of the lake. Parks can play a role in this, providing for natural stormwater filtration and increasing riparian vegetation, all while allowing for recreational or passive use.

Urban Green Space Compensation

Urban areas often struggle to provide adequate green spaces for residents due to increased densities and a lack of space. Instruments such as greening facades, backyards, green roofs, green streets, and other smaller interventions help provide urban green spaces in densely populated urban areas.

High Level Recreational Trends

High-level park trends provide insights into what park amenities people want and will help Kelowna create park spaces that people will use and enjoy. Across Canada, one of the most significant trends is that programmed recreation demand has decreased while self-directed leisure has increased in popularity (Department of Canadian Heritage, n.d.). This means that there is demand for more flexible, multi-purpose recreational spaces such as gymnasiums with adjustable barriers and fields that accommodate many different sports (Alberta Culture and Tourism, 2013; Canadian Fitness and Lifestyle Research Institute, 2011 (both within Town of Okotoks, 2017)). These trends point to a need for programming that is shorter and more flexible to accommodate residents' busy schedules. Drop-in programs or low-cost spontaneous activities are another potential option (Vancouver Board of Parks and Recreation, 2017; City of Kelowna, 2018). There is also an opportunity to create flexible parks spaces with trails, as trail-based recreation has also increased in demand. Incorporating a diverse range of activities and amenities from different cultures, such as cricket fields or Kabaddi courts, helps create inviting spaces for residents of all backgrounds.

Outdoor activities that engage with the natural environment foster both an active lifestyle and an appreciation of nature. Across B.C., there has been an increased desire to engage with nature, particularly for children and families (Vancouver Board of Parks and Recreation, 2018). This demand could be supported through nature-based programming such as outdoor classrooms, natural playgrounds, and youth-oriented community gardens.

Barriers to accessing and participating in recreation are another important consideration for parks planning. Some of the biggest recreation barriers to individuals are the cost of equipment and enrolment fees, a lack of interest in sports, and the location of programs, clubs, and facilities (Town of Okotoks, 2017; B.C. Recreation and Parks Association, n.d.). Grants to cover the cost of sports equipment, waiving enrolment fees for lower income communities, and offering free sessions and trials to get people interested in sports are some potential solutions to explore.

Parks can sometimes be difficult for people to access without a car, particularly if there is little transit access to the park (Vancouver Board of Parks and Recreation, 2017). To address this issue, Vancouver is changing park access modelling to consider actual walking or travel catchments rather than distance "as the crow flies". Another important consideration is ensuring that all neighbourhoods are well serviced with sidewalks and improving consistent infrastructure where needed. Sidewalks act as linear park space particularly when design is carefully considered and also act as safe pedestrian connections to other park spaces and urban amenities.

Where possible, it is important to reach out to communities that require assistance to access parks in order to ensure they are receiving appropriate assistance (B.C. Recreation and Parks Association, n.d.) Another barrier to recreation is culture, as many immigrant communities feel nervous about participating in programs or are unsure about what they want to participate in. Programs that cater to these communities or free sports trial programs might help break down this barrier. These measures will help create parks that are useable by all residents.

Most Popular Park Activities (Canada-wide and in B.C.)

- Walking
- Sitting
- Cycling
- Running and jogging
- Basketball
- Baseball
- Picnicking
- Soccer

Activities increasing in demand include:

- Trail-based recreation
- Hiking
- Pickleball courts
- Children's waterplay facilities
- Indoor tracks
- BMX facilities
- Ziplining
- Mountain biking
- Splash pads for kids

(Sources: Department of Canadian Heritage, n.d.; Town of Okotoks, 2017; Vancouver Board of Parks and Recreation, 2017)

Trail Based Recreation

Trail-based uses are increasing in demand. Even before the pandemic and especially over the course of the pandemic, residents have increasingly begun using trails for both recreation and active transportation. Around 75% of Canadians use trails for exercising and enjoying the outdoors, most of whom are between the ages of 9-40 (Trans Canada Trail, 2020). This coincides with an increase in active transportation use. Increased trail use could support the creation of more multi-use pathways for both recreational and transportation uses, within and connecting parks (Strathcona County, 2019).

Common Trail Uses:

- Hiking
- Mountain biking
- Running
- Equestrian
- In-line skating

(Sources: District of Squamish, 2010)

A growing challenge with trail use is user conflicts. There is increasing demand for motorized uses such as e-bikes or scooters, which can travel at higher speeds than walkers and bikers and can be a safety hazard. As a solution, many municipalities are widening trails or have separate trails for different users where possible (District of Squamish, 2010; National Capital Commission, 2020; Town of Aurora, 2011). Another method is using a trail designation system to identify trails based on their type of use and difficulty rating. For example, Squamish has five different trail types, including primary, collector, neighbourhood, and specified use trails. Kelowna currently has six different trails types including Major Urban Promenade, Major Multi-use, Standard Multi-use, and Narrow Multi-use (City of Kelowna, n.d.(a)). There is an opportunity to add more nuance to the trail classifications to better determine the uses, size, and maintenance needed for each trail.



Volunteerism and Stewardship Trends

Volunteering and stewardship are important parts of parks operations and maintenance. These volunteers and stewards provide additional support to parks staff in a variety of areas. In 2018, roughly 12.7 million Canadians volunteered in some capacity, with people over the age of 50 generally dedicating more time to volunteering than those under 40 (Statistics Canada, 2020). In 2018, volunteers for sports and recreation organizations across Canada dedicated an average of over 100 hours per person per year, demonstrating how much these organizations rely on volunteer efforts. However, few youths volunteered for these organizations. Volunteer efforts within parks should try to appeal to younger generations and should encourage these volunteers to continue volunteering in the future. Creating volunteer opportunities for immigrant communities is also important, as these groups generally have lower levels of volunteerism (Statistics Canada, 2015).

Stewardship programs can help get people of all ages involved in protecting parks and natural areas and create a sense of ownership over these spaces. Several municipalities in B.C. have stewardship programs such as the Stanley Park Ecology Society, the Young Naturalists Club, the Environmental Youth Alliance, and Nature Vancouver, as well as a number of individual park associations (Vancouver Board of Parks and Recreation, 2014; City of Vancouver, n.d.). These programs focus on different aspects of park stewardship and many are targeted towards youth. There is an opportunity to use these programs to foster ownership of the environment at a young age.

Partnerships with other organizations and recreational groups is another part of effective parks implementation. This includes partnerships with school boards, libraries, health organizations, educational groups, sports and recreation groups, and post-secondary institutions among others (City of Richmond, 2018; Abbotsford Parks, Recreation & Culture, 2014). Partnerships with hard-to-reach groups like immigrant-serving organizations, cultural groups, seniors organizations, churches, and organizations for people with disabilities are also essential (City of Richmond, 2018). This can help create diverse park spaces that are enjoyable for all residents.

Careful planning of volunteer opportunities and appropriate support measures can create a strong and effective volunteer network to aid in the operation and maintenance of parks. Some potential volunteer opportunities from other municipalities include: volunteer ambassador programs, volunteering with sports organizations, parks ambassador programs, mentorship programs, volunteer tourism, youth volunteer programs, school programs and trail mapping (City of Richmond, 2018). Volunteers and environmental stewards can also help with removing invasive plants, monitoring wildlife, plantings, public education, and observing and recording user activities (Metro Vancouver, n.d.; B.C. Parks, 2012).

Moving forward, there is an opportunity to build public awareness, enthusiasm, and commitment for volunteering in parks. Further clarity on what volunteer opportunities are available can help build public awareness and increase participation. Volunteer programs can also be better supported through appropriate staff training and support regarding volunteer coordination and community engagement. Providing certain benefits to volunteers, particularly those engaged in dangerous activities, is another option to support volunteers (B.C. Parks, 2012). A combination of these measures would help attract new volunteers and effectively utilize them.

Ecosystem Services

Parks play an important role in providing ecosystem services such as providing temperature regulation, clean air and water, wildlife habitat, and stormwater attenuation. They help to increase the natural habitats within urban areas and provide the primary soft landscapes within cities (Park People, 2017). However, it can be difficult to measure the value that these ecosystem services provide, since they are public goods and are difficult to clearly define. One potential way to define them would be to measure how important they are to residents and how much people would be willing to pay to preserve them (Ecosystem Valuation, n.d.). Another would be to measure the value of their use or potential use. It is essential that Kelowna includes the value of ecosystem services in decision-making for parks, even if it is more difficult to measure.

Parks can provide essential stormwater management, as they reduce runoff by around 8 to 10 times compared to

impermeable surfaces like roads and parking lots. This can depend on how well used the park is, as the soil in well used parks can become compacted, reducing its ability to absorb water (Park People, 2017). Other cities are enhancing the stormwater benefits of their parks and open spaces by adding elements such as rain gardens, bioswales, stormwater management ponds, and permeable paving (Park People, 2017). Adding these elements provides many benefits, including expanding urban habitats, improving the performance of environmental functions, creating new recreational spaces, and saving money. There is an opportunity to include this type of green infrastructure into new park designs or redesigns of older parks and to include community members in the design and maintenance of this infrastructure (Parks People, 2017). Financial tools, such as stormwater charges or credit programs can help fund green infrastructure projects. For example, the Town of Newmarket has a stormwater charge that is based on the level of runoff on a property. This additional funding would help address some of the challenges with green infrastructure, including increased maintenance and costs, the need for monitoring and evaluation programs, and balancing the needs of park users.

Climate change will continue to have a major impact on parks and Kelowna will need to adapt to these changes. By affecting seasonal temperatures, climate change could have an impact on the types of activities that are available to Canadians (Department of Canadian Heritage, n.d.). In turn, this could impact the types of facilities that are needed and the costs of operating and maintaining these facilities. Increased hazards created by climate change, such as flooding or wildfire smoke, could also impact how parks function and could increase maintenance and repair costs.

Ecosystem Services: The benefits that people obtain from ecosystems. These can include provisioning services like food and water, regulating services such as flood control, cultural services like spiritual, recreation, and cultural benefits, and supporting services like nutrient cycling (Green Facts, n.d.).

Climate Change

Climate change will continue to have a major impact on parks and Kelowna will need to adapt to these changes. A recent climate modelling report for the Okanagan identified the following local changes anticipated from a changing climate:

- Warmer temperatures year-round;
- Summers that are considerably hotter and drier;
- Increased duration of growing season;
- Warmer winter temperatures;
- Increased precipitation across all seasons except summer; and
- Shifting seasons (Climate Projections for the Okanagan Region, 2020)

By affecting seasonal temperatures, climate change could have an impact on the types of activities that are available to Canadians (Department of Canadian Heritage, n.d.). In turn, this could impact the types of facilities that are needed and the costs of operating and maintaining these facilities. Increased hazards created by climate change, such as flooding or wildfire smoke, could also impact how parks function and could increase maintenance and repair costs. Parks provide natural water storage and filtration that balances the water cycle and rain water management to compensate against unexpected flooding.

Parks are also essential to regulating urban climate. Through phenomena such as the urban heat island effect and with climate change continuing to affect weather patterns, cities are expected to get hotter. Parks play an essential role in regulating urban climate by providing shade and cooling. Parks also offer the opportunity for people to spend time outside of their homes.

*Table 5. Summary of Central Okanagan Valley Bottom Climate Changes from Climate Projections for the Okanagan Region (2020)**

Climate Variable	Past Days	Projected Change from 1961-1990 Baseline	
		2050s Change Average	Range (10 th to 90 th percentile)
Summer Days above 30°C	24	32	19 to 48
Hottest Summer Day (°C change)	35.3	4.4	2 to 6
Cooling degree days (°C change)	230	354	173 to 565
Coldest Winter Night (°C)	-18.8	6.1	4 to 10
Heating degree days (% change)	3430	-23%	-29% to -16%
Spring precipitation (mm)	74	13%	2% to 21%
Change in very wet days (mm)	17	39%	7% to 80%

This climate models indicates what will happen with local weather and climate impacts with unabated temperature increases caused by GHG emissions. Perhaps the greatest and most severe of the changes will be the increased variability and unpredictability of day-to-day temperatures and weather phenomena.

Amenity and Provision Trends

Park amenity trends focuses on the types of facilities that municipalities are incorporating into their parks and recreation systems, rather than just user demand. Across Canada, municipalities are generally moving towards more multi-use facilities with flexible spaces (Strathcona County, 2019). These facilities are beneficial community hubs as they have lower operational costs, serve larger catchment areas, and are more convenient. However, they may be less equitable, since they are not always as accessible as local facilities.

Multi-generational programming is also increasing in popularity, as are age-friendly design features, more facilities for seniors, and programming for adults of all ages. Facilities can be made more multi-generational by including more rest spaces, child-friendly spaces, and mobile technologies in their facilities. There is also an opportunity to develop large indoor fields and multi-sport indoor training facilities in both new and expanded facilities (City of Kelowna, 2018). Aging infrastructure continues to be an issue for municipalities across Canada

but can serve as an opportunity to update infrastructure to be more responsive to the current and future demographics of the community.

Conclusion

There are many population and parks trends that impact the future of parks planning in Kelowna. The large senior and older adult populations in Kelowna stress the need for age-appropriate facilities and programming for all ages. The growing diversity of the community emphasizes the need for park spaces that better includes people of different backgrounds and creates spaces for everyone to come together. As one of the fastest growing cities in Canada, it will be essential to ensure that there are adequate park facilities for all residents and that the park space provided can keep up with growth. This is especially true given the limited land and increasing densities in Kelowna. The growth of trail-based recreation will also be critical to consider in the design of an overall connected green network in Kelowna. Many of these needs can be addressed by incorporating more multi-use, flexible spaces and programming to accommodate residents' busy schedules.

While having a variety of amenities is important, ensuring that park space is accessible to everyone is equally important. The pandemic has demonstrated the importance of parks to mental health and the impact of the existing inequitable distribution of parks.

Finally, it is important to maintain a balance between recreational use and protecting the ecological services that parks provide. Okanagan Lake in particular is both a key ecological asset as well as a tremendous asset to the city as a provincial, national, and international tourist draw; therefore, it is essential to balance both benefits that the lake provides. Climate change will continue to impact how parks function and municipalities will need to adapt to these changes and increased hazards. The location of Kelowna in the Okanagan Valley places particular importance on the parks and open space system providing important natural habitats and ecosystem services which help to mitigate the risk of natural hazards to the city.

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