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Research Brief: Land Education Teacher Professional Development

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Research Brief: Land Education Teacher Professional Development

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In Washington State, Senate Bill 5028 (2018) mandates the teaching of tribal sovereignty curriculum k-12 (STI) and integration of “Native American curriculum developed by the office of the superintendent of public instruction into existing Pacific Northwest history and government requirements” of existing teacher preparation programs. To do this work well, teacher educators in universities and communities must partner to prepare teacher candidates and in-service teachers to implement the curriculum within the context and goals of tribal nations. However, research finds that this work requires white teachers to confront their own biases that prevent them from being in true partnership with tribes to implement Indigenous informed curriculums. Our work shows that land education—that centers Indigenous people relations to land—in teacher professional development represents one avenue to do this work in good way, that is different from existing professional development models. To be clear, the findings from this research are not new understandings for tribal nation communities. The experiences and revelations depicted by white teacher participants represent generations of awareness by Indigenous peoples in public schools. We put forth the design of the LETPD and impact on white teachers for school districts as a framework to improve their school-based curriculum and engagements with Indigenous peoples. Before we describe the Land Education Teacher Professional Development (LETPD), we describe how this type of professional development (PD) is not the same as the more common place based PD work that happens in our region.

Genealogy of Place Based Teacher Professional Development Work

In schools, the dominant system of knowledge is the Euroamerican, or western one. To bring Indigenous knowledges into schools, previous research shows that white teachers must first confront their own knowledge system before they can begin to include Indigenous perspectives in a respectful mannerⁱ. Thus, PD for white teachers should assist them to understand:

1. their own world view
2. how their worldview orients them to place/land
3. that their world view is not universal
4. other knowledge systems exist
5. there is value in embracing and incorporating other knowledge systems in the classroom.

There is an ample body of prior research (both Indigenous and university led) that shows what must happen generally in educational practice to make room for Indigenous knowledge systems in classroomsⁱⁱ; but there is not much work that examines how teacher PD should do this.

Most significantly, the teacher PD work that has been done finds that white teachers need to confront how their western world view is generally at odds with Indigenous peoples knowledge systems and relationships to place. This type of knowledge work with white teachers has largely

taken place in the realm of science education as western science education in pk-12 maintains a nature/human divide that is at odds with Indigenous views of science that do not promote such binaries. Additionally, this nature/human divide of western knowledge reflects white teachers' beliefs that land should be owned, exploited, and developed for capital gain. While place-based education and environmental educational work with white teachers has challenged these perceptionsⁱⁱⁱ Indigenous communities and thinkers show that merely challenging these perceptions is not enough to support Indigenous sovereignties.

Indigenous teacher educators have also documented that white teachers need to learn *how* to see their own cultural ways of understanding science. This work is challenging because it unsettles white teachers' understandings of themselves described above. Whites in general tend to think that their beliefs are those of everyone, and to find out that this is not the case, can be challenging for them^{iv}. Moreover, this research shows that to do science work in a way that brings Indigenous perspectives into curriculum, white teachers must make room for multiple views to be incorporated in science. This requires white teachers to make value commitments that engage Indigenous views and determine that it is worth their time and effort to do this work. This is particularly relevant in Washington because of the mandate to teach the Since Time Immemorial Sovereignty Curriculum. Too often the work with white teachers stops at an additive stage: teachers simply add Indigenous content to existing frameworks shaped solely by western models of knowledge.

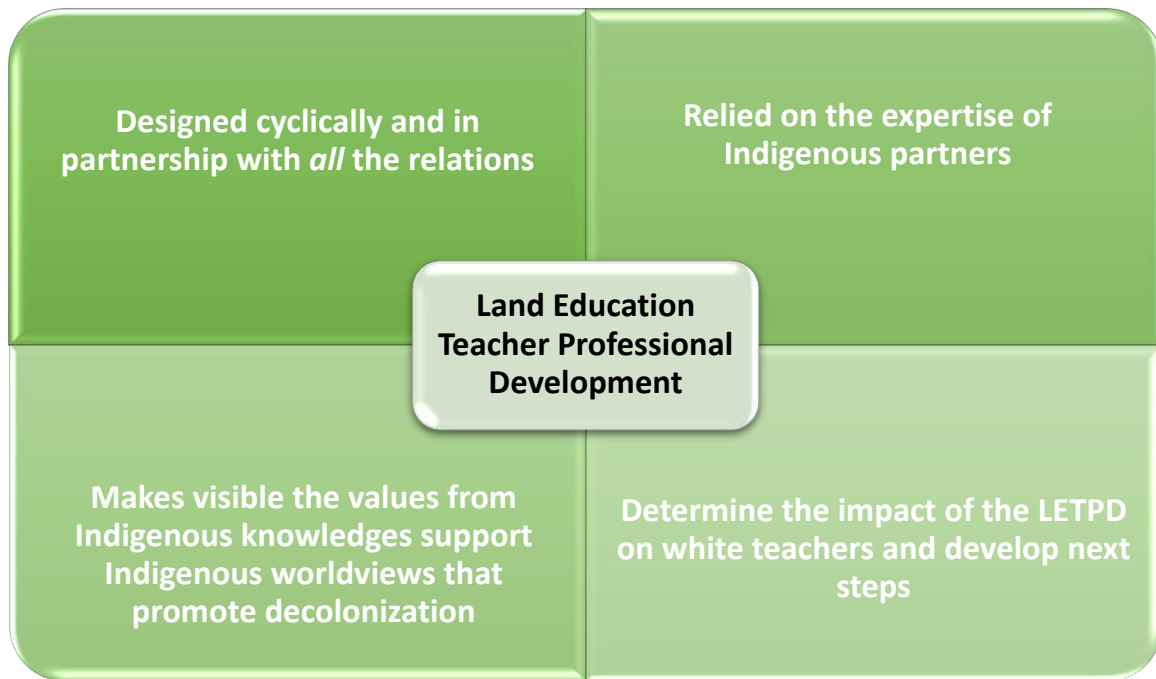
The Land education approach *insists that if you include Indigenous curriculum, you must undo the framework of the curriculum and develop a new approach*, but to undo the frameworks, teachers (in this case white teachers) must be willing. From a Land education approach built on Indigenous thinkers like Vine Deloria Jr. and Leanne Simpson, this reworking represents a political act because bringing in Indigenous perspectives for white teachers asks them to decenter themselves. In other words, it confronts them with the way their western knowledge and schooling work as part of a larger system that maintains white dominance over tribes that has produced things such as the Dawes Act, rejection of salmon fishing rights, and general disregard of treaty rights.

Additionally, in prior environmental and place based work, *Indigenous communities are an afterthought* in terms of the design of the teacher PD programs. Programs are made by outsiders and executed by outsiders, thus leaving white perspectives largely unchallenged. Land education *insists tribes are central partners*, requiring relevant Indigenous knowledges and relationships to shape the PD process.

Design of the Teacher Professional Development from a Land Education Perspective

Our work, including the LETPD design process, was guided by Indigenous methodologies^v that guided our design to: 1) design a project that centered Land education approaches for white teachers with the goal of building better relationships between teachers and local tribal communities; and 2) determine the impact of the Land-centered approach on white teachers'

mindsets or epistemologies to enact responsible opportunities for teachers to desettle their learning. The design of a Land-centered approach required us to make particular value commitments^{vi} in the design. For example, at each stage of this study we centered our relationship as Indigenous teacher educators to gain feedback from the Coast Salish Nation community to determine what should come next. Here we describe the LETPD framework, consisting of four principles, and include examples from Summer 2019.



1. Designed Cyclically in Partnership with *All* the Relations of the Local Tribal Nation Indigenous teacher educators collaborated to design Land-based experiences for classroom teachers that were informed by our more-than-human relatives. We considered what seasonal and cultural activities were occurring within the community during the LETPD that could inform teachers' understandings of Land education and partnership with Indigenous communities. Immediately it became clear that the annual Canoe Journey, hosted by the Coast Salish Nation that year, would be occurring at the same time as the LETPD. With much deliberation, we determined that holding the LETPD in conjunction with Canoe Journey would align with community goals of encouraging teachers to attend cultural events. From there, we connected with community leaders and developed an agenda, which included visiting traditional reef net fishing sites. Because the LETPD was designed and delivered with humans and more-than-human relations, *at the start of Day 1*, it was clear that the water was not inviting the group to visit. The winds were high, and the waves made it unsafe to bring participants on the fishing boat. In conversation with community leaders and participating fishermen, we changed the plan to spend all day at the school library and share content with teachers through oral presentations, storytelling, and resources. We planned to then visit the waters on Day 2 when the canoes would be arriving for the initial ceremony.

2. Relied on the Expertise of Indigenous Partners

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3. Land Education makes Visible Indigenous Knowledges that Support Decolonization

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4. Determine Impact on White Teachers and Develop Next Steps

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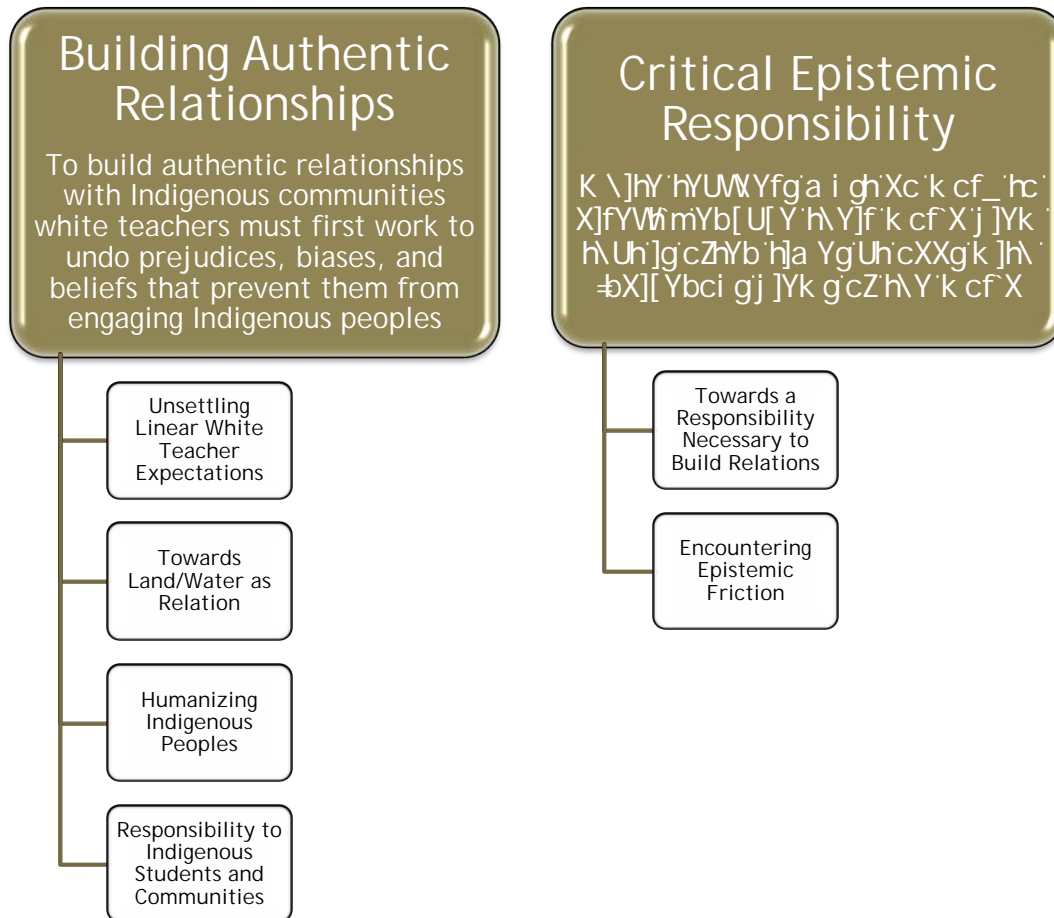
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Key Findings

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H\Y`dUfh]V]dUbh`XYd]V]W\X`Ub`Yl`dUb`XYX`fY`Uh]cbg\]d`k`]h\`_`UbX`Ug]a`dUW]b[`h\Y]f`fYg]dcbg]V`]hmic`
bX][`Ybci`g`W\]`XfYb`h\Uh`a`c]`YX`VYncbX`U`gh`UhY`W`ff]W`Uf`a`UbX`UhY`" `b`h`i`fb`z`h\Ym`Vta`a`]h`h`YX`hc`U`
dfc`W`gg`cZ`hf`Ub`g`Z`cfa`Uh]cb`Xi`Y`hc`h\Y`i`bgY[h]b[`cZ`h\Y]f`dfYj`]ci`g`mbcfa`Uh]j`Y`W`ff]W`Uf`
Yb[`U[`Ya`Ybhg`''

' " 7f]h]W] `9d]ghYa]WFYg]dcbg]V`]hmic`Hck UfXg]U`FYg]dcbg]V`]hmic`6i]X`FY`Uh]cbg\]dg
K \]hY`hYUW\Yfg`\Uj`Y`hc`Vi`]X`VYhYf`fY`Uh]cbg\]dg`k`]h\`hf]VU`dUfhbYfg`z`Vi`h`h\]g`f`Ye]`]fYg`Ub`UW]j`Y`
Vta`a`]ha`Ybh`z`cf`fYg]dcbg]V`]hmicb`h\Y]f`dUfh`h\Uh]g`Vi`]`h`Z`ca`U`XYg]fY`hc`\Uj`Y`Ui`h\Ybh]W`
fY`Uh]cbg\]dg`k`]h\`bX][`Ybci`g`Vta`a`i`b]h]Yg`'5`g`W`cc`U`Xa`]b]g`f`U`h`c`f`g`U`f`Y`X`h\Y`W`U`Y`b[`Yg`k`]h`
Uh`Ya`dh]b[`hc`Vt`_`U`V`c`f`U`h`Y`U`W`c`g`g`f`Y`Uh]cbg\]dg`VY`h`Y`Y`b`g`W`cc`_`X]g`f]V]g]UbX`bX][`Ybci`g`
Vta`a`i`b]h]Yg`'FYZ`Y`W]b[`cb`h\Y`]a`dUW]cZ`h\Y`@`9HD8`cb`h\Y]f`Uddfc`UW`hc`h\Y`GH`W`ff]W`i`a`z`Ub`
U`Xa`]b]g`f`U`h`c`f`g`U`f`Y`X`.'

T'c'ij`g't`'ij`c'p`'y`c'k'v`'y`g`'t`g`'i`q'p'p'c`'k'o`r'rgo`g'p'v'ij`k'u`'U'k'p'eg`'V'k'o`g`'K'o`o`g'o`q't`k'c'r`'e'w't`k'ew'w'o`O`K'u`'h'ng`'p'q`.'h'g'v`'u`'ij`k'p'm`
c'd'q'w`'f`'q'y`g`'u'g't`x'g`'q'w't`'k'p'f`k'i`g'p'q'u`'i'w'w'f`g'p'u`'c'p'f`'ij`q'y`'f`q`'y`g`'j`g'r`'q'w't`u'g'w'g'u`'i`c`k'p`'t`g'r`c`v`k'p'u`j`k'r`u`'y`k`j`"
q'w't`'J`E`q`c`u`'U`c`r`k`ij`'P`c`w`'q`p`_`p`g`k`i`j`d`q`u`.'u'q`'ij`c'v`y`g`'c`'t`g`'d`g`w`g't`'u`g't`x`k`p`i`'c`m`i`q`h`q`w't`'i'w'w'f`g'p'u`.'k'p`'r`c`'t`'k`e`w`r`c`'q'w't`"
k'p'f`k'i`g'p'q'u`'i'w'w'f`g'p'u`O`U`q`'ij`c'v`y`k'u`'c`n`u`q`'ij`k'u`'ij`q'y`'c`m`i`q`h`q`w't`'e`q`p`v`g`p`'k`u`O`Y`g`'l`w`u`'l`g`n`'y`g`'j`c`x`g`'c`'y`j`q`r`g`'p`g`y`"
y`c`f`'q`h`'ij`k`p`m`k`p`i`'c'd'q'w`'v`ij`g`'e`q`p`v`g`p`'t`c'ij`g't`'ij`c'p`'c'p`'c`f`f`/`q`p`'v`ij`g`'e`q`p`v`g`p`o`'

H\]g`fYZ`Y`W]g`h\Y`]a`dcf]h`Ub`W`UbX`h\Y`fc`Y`cZ`@`9HD8`]b`a`U`_]b[`hYUW\Yfg`a`cfY`
fYZ`Y`W]j`Y`dfUW]h]cbYfg`''

4. Critical Epistemic Responsibility: Encountering Epistemic Friction

However, relationship building is often fraught and can result in white teachers feeling conflict around their newfound learning. With regards to engagement with tribal communities another educator explained their conflict in building relationships responsibly:

I think I did try to call and left a voicemail. And then the email, and I emailed back and then it just kind of ended up in in the air. And what the problem is like our pace of things in teaching, then we're past it and we we're on to the next thing and it's stuff is going so fast in the classroom...

This educator shared their specific frustration with the challenges in building relationships with local tribes within the current educational structure. This participant spoke to the challenge of engaging in partnerships that relied on individual relationships that were not supported through institutional commitments and resources. These “epistemic frictions” that teachers encounter when they begin to understand that with knowledge comes the demand of action: to change the current circumstances demands the teacher act in a way to critically counter the conditions that make the inhibiting conditions on others possible. This frustration, or epistemic friction, can be a catalyst for transformative change^{viii}.

5. Building Authentic Relationships: Humanizing Indigenous Peoples

In this LETPD most of the teachers were previously exposed to the STI curriculum. However, the LETPD had an impact beyond curriculum training in that it humanized Indigenous peoples in ways that led to recognition of Indigenous students in classrooms that had previously been unseen by their teachers. Teachers understood that they need to have relationships with Indigenous students in their classrooms. Many teachers identified this realization as an “epistemic friction” or feeling guilty they did not know these students were in fact Indigenous. This unsettled their previous engagements with students that were grounded in a lack of relationship. One teacher revealed the following challenge of a curriculum change they implemented after the LETPD:

So this is like where it got really interesting so I started off my ... classes talking about the ... tribe because I'm in [PNW City] and I like showed a couple videos that were like made by the ... tribe and what I wasn't expecting was like I have one student in one of my classes who like started crying and had to leave and it was super triggering and it turns out she was an enrolled [tribal] member and... both of her deceased grandmas were in the video, it was like all this stuff... I wasn't really prepared to handle right.

This realization and the emotional impact it had on the student led the teacher to an awareness of their lack of preparedness to implement Indigenous curriculum. The teacher was inspired to bring Indigenous content into the classroom, fumbled and introduced material in a manner that wasn't in relationship to students. Using their newfound responsibility to be in good relation with Indigenous peoples, this teacher reconsidered their role as a white teacher in relationship to Indigenous students and community:

I really became aware how many students are actually tribal members that I teach because before they've just kind of like blended into everything, I didn't notice or didn't know, so that was like I was like “oh shit”, I was not doing this right. So the second semester I like had to preview, I had to like I tried that girl only was she was my first semester class but yeah really realizing like when you do that kind of stuff that you actually aren't you could be like there are local connections when you talk about local

mkdgu'vj cv'f(qw'f qp)'w'pf gt wcpf "cv'cm'cpf 'vj gp't {kpi 'vq'kplqt o 'lwf gpw'kp'c'y c { 'vj cv'u'kng'uqo gj kpi "
eqo rrgvgr' "qmwkf g'qh'f' qwt 'hpqy rgi g'dcug'y j gt g'vj g'f t g'vj g'gzr gt uo'"

H\Y'hYUW\Yfg'g\UFYX'hUh'ci h'cZ'h\Yg'i bVta ZcfhUV'Y'ghfi [['Yg'UbX'`YUfb]b['UVci h'k \c'h\Y'
gh XYbhg'k YfY]b'h\Y]f'WUggfcca ž'g\Y'WYUHYX'fY'Uh]cbg\]dg'hUh'U`ck YX'gh XYbhg'hc'Vf]b['a cfY'cZ'
h\Ya g'Y'Yg]bhc'h\Y'WUggfcca " 'H\]g'fYdfYgYbhg'U'XYd'm]a dcfhUbh'ghYd'Zcf'k \]hY'hYUW\Yfg'hc'HU_Y'
hUh'Vch' \i a Ub]nYg'UbX'a U_Yg'`bX][Ybci g'gh XYbhg'dfYgYbh]b'h\Y]f'WUggfcca ž'Vi h'Ugc'fYZYVW'g'
h\Y'Vta a]ha Ybh]h'HU_Yg'Zcf'k \]hY'hYUW\Yfg'hc'VY'Vtbg'Ubh'mYj U'i Uh]b['ck'h\YmUFY]b'fY'Uh]cb'hc'
`bX][Ybci g'gh XYbhg'UbX'Vta a i b]h]Yg'

*" 6i]X]b['5i h\Ybh]WFY'Uh]cbg\]dg'FYgdcbg]V]]hmhc'`bX][Ybci g'Gh XYbhg'UbX'
7ca a i b]h]Yg'

: fca'h\Y'UV]]hmhc' \i a Ub]nY'`bX][Ybci g'gh XYbhg'UbX'gYY'h\Ya]b'h\Y'WUggfcca 'Vta Yg'h\Y'
fY'UHYX'k cf_`cZ'k \]hY'hYUW\Yf'fYgdcbg]V]]hmZcf'Vi]X]b['fY'Uh]cbg\]d'h'fci [\ 'Wff]W' i a 'k]h' bch'
cb'mgri XYbhg]b'WUggfcca g'Vi h'h\Y'Vta a i b]h]Yg'h\YmVta Y'Zfca " 'CbY'hYUW\Yf'g\UFYX'z'hUh'Yj Yb'
k \Yb'`bX][Ybci g'gh XYbhg'UFY'UVW'ci bhYX'Zcf]b'WUggfcca g'z'h\Ymgh]`fYa U]b'UVgYbh' "

Y j cv'y cu't gcm' "o ci kecn'ku'vj gt g'u'c'k'wng'dq'f' 'vj cv'Kj cf'kp'o { 'ercuut qgo "c'lgY' "{ gct'u'ci q'cpf' 'j g'ku' "
]Eqcw'U'rkuj 'Pcvkqp'í The teacher expands that the young student missed prior Indigenous speakers
who had come to the school. The teacher continues: Uq'vj gp'vj ku'y cu'vj g'hqmqy kpi "{ gct'y j gp'y g'f'kf' "
]Ecpqg'Lqwtpg'í 'j ku'vgej gt'uck'f' 'vj cv'f' g'y j gp'vj g'f' i g'vi qv'dcem'vq'ercuut'j g'eqw'f'p'v'wq' 'xcmkpi' "
cdqw'j ku'ewmw'g'y j kej 'y cu'vj g'ht w'vko g'vj cv'f' g'f' 'uj ct gf' 'cdqw'j ku'ewmw'g'cpf' 'y g'Kj kpm'vj cv'vj g'f' 'vj cv'
hc o kf' 'ku'vj g'qpr'f' 'Pcvkxg'hc o kf' 'vj cv'y g'j c'xg'kp'qwt'uej qqr'ODw'vj cv'k'y cu'lwaw't gcm'f' 'rt qh'qwpf' 'hqt'j ko "vq' "
ugg'j ko ugr'h'cpf' 'vq'ugg'j ku'ewmw'g'dgkpi' 'egr'gd cv'gf'0'

H\Y'hYUW\Yfg'_bYk'h\Ym\UX'h\]g'BUh]j Y'ZJa]m]b'h\Y]f'g'W'cc'ž'Vi h'h\Y'Wff]W' i a 'X]X'bch'a U_Y'
gdUW'Zcf'h\Y'gh XYbh' " 'Cb'mik \Yb'`bX][Ybci g'ghcfnmY'`Yfg'k YfY]bj]hYX]bhc'h\Y'g'W'cc'`X]X'h\Y'
nci b['Vcm]X]g'W'gg' \]g'W'hi fY'UbX'ZYY'`dfYgYbh'z'fYdfYgYbhYX' " K \]Y]h]g'X]g'Vti fU[]b['hUh'h\]g'W'X'
cb'mgJk \]g]XYbh]miUg'fY'Yj Ubh'h'fci [\ 'Ub'additive'Uddf'cUW'z'hYI Ya d']Z]YX'h\Y'dfcZci bX'
]a dUW'ihUh'W'cb'c'W'f'k \Yb'g'W'cc'g'k cf_]b'dUf'hbYfg\]d'k]h' hf]VU'`bUh]cbg'hc]b'Vt'f'cdf'UhY'
`bX][Ybci g'W'ff]W' i a 'UbX'dYfgdYVW]j Yg]b'fYgdYVW'z' `k'Ung' " "

Crossing the Bridge: Recommendations Going Forward

: fca'h\Yg'Z]bX]b[g'z'k Y'fYVta a YbX'hUh]g'W'cc'`X]gh]VW'g'XYj Y'cd'dUf'hbYfg\]dg'k]h' `c'W' hf]VU'
bUh]cbg'hc'd'Ub'UbX']a d'Ya Ybh'U'gYf]Yg'cZ'@9HD8g'hUh'c'W'f'c'j Yf'h]a Y'UbX'UFY'g' ddcf'hYX'k]h'
fYgci fW'g' H\Y'@9HD8g'a i gh'VY'`YX'Vmih]VU'`bUh]cb'hYUW\Yf'YXi W'h'cf'g'UbX'W'V'Y'XYj Y'cdYX']b'
Vt'`UVcfUh]cb'k]h' `bX][Ybci gi b]j Yfg]hmihYUW\Yf'YXi W'h'cf'g'hc]b'W'Y'Ug' W'dUW'hmZcf'h\Y'k cf_ " 'K Y'
fYVta a YbX'h\Y'@9HD8'c'W'f'c'j Yf'h\Y'Vti fg'y'cZ'Uh'`YUgh'U'Zi `UW'XYa]W'hYUf'UbX'fYg' `h]b'
g'ghU]bUV'Y'z'fYV'f'f'c'W'`dUf'hbYfg\]d'VY'hk Y'Yb'g'W'cc'`X]gh]VW'g'UbX'`c'W' hf]VU'`bUh]cbg'`H\Y'@9HD8'
g'ci `X']b'W'XY. "

1. time for teachers to listen to Indigenous peoples
2. a clear introduction to Land
3. active engagement in Land based learning
4. follow up curriculum development sessions

Time for Teachers to Listen to Indigenous Peoples

Teachers need time to hear Indigenous peoples experiences with school and longstanding community knowledges stemming from relations with Land. In this, teachers have an opportunity to become aware the generational trauma that has occurred from schools and directly attributed to the actions of teachers, and to consider how these traumas continue within Indigenous community even if today's teachers are well-intentioned.^x This build teachers' sense of responsibility to build partnerships with local tribal nations to ensure positive experiences for Indigenous students. The time spent listening to Indigenous peoples also builds teacher awareness of complex knowledges held by Indigenous peoples. Our research found that teachers were surprised by their realization that Indigenous peoples know things that school curriculum is completely ignorant of (e.g. technologies of reef net fishing, historical understandings of fish and water patterns). This newfound awareness builds a foundation for teachers to begin their commitments to transform school curriculum.

Introduction to Land education

For teachers to build on their developing understandings and transform curriculum, we suggest they have an opportunity to learn foundational theories of Land education. Offering teachers language for a Land education model helps them to make sense of the "epistemic shift" that occurs when they begin forming relations with more-than-humans. We find that not doing this, results in teacher confusion when actively engaged in Land based learning. Meaning that if we do not support teachers to understand Indigenous relations with Land as a system of education *before* visiting Land and Water, they struggle to make connections to school based curriculum.

Active Engagement in Land Based Learning

After building foundational understandings, teachers must then have an opportunity to actively engage in Land based learning led by the local tribal nation community. In this report, we offered examples of an LETPD that connected teachers with the Canoe Journey and had intentions to visit traditional reef net fishing sites. The Land based engagements can include any number of experiences determined by the season and cultural activities, and as we depicted weather and events of the day. In our work, we have taken teachers on a fishing boat to hear stories of the island and fishing techniques from tribal nation leaders, visited the banks of the river to hear memories of growing up on the river as fishers, and spent time at the Day School to learn histories while connected to that place. Other engagements could include canning salmon, pulling canoe, harvesting cattails, picking berries, etc. The opportunities are endless when led by local tribal nations with deep knowledges of and relations with Land and water across seasons.

Follow up Curriculum Development Sessions

To bridge teachers developing understandings and "epistemic responsibility" to transform their work with Indigenous students and communities, a series of follow up sessions to bridge Land based learning with school-based curriculum development must occur. These sessions should take a

workshop form where teachers can plan in content area or grade level teams to evaluate established units of study or identify new curricular opportunities to center Land education as a construct to engage Indigenous studies in school curriculum. Indigenous university teacher educators can support this process with tribal nation community educators to bridge school curriculum, standards, assessments, and other factors that drive classroom learning with Indigenous knowledges and ways of being. The necessary number and frequency of these sessions will vary by setting, but they must occur over time and with recourses to compensate tribal nation partner time and expertise. Resources must also be made available for teacher curriculum needs and opportunities to engage students in active Land based education (which is in need of further development and evaluation).

Conclusion

We find great value and opportunity in the LETPD to foster authentic relationships between schools and tribal nations and teacher's "epistemic responsibility" to made transformative change in school based learning. There is an urgent need for school transformation and commitments to decolonization to secure positive futures for Indigenous children today and for generations to come. As we stated initially, we have not presented newly created knowledge or understandings but we call on schools and policy makers to take seriously what Indigenous peoples have known to be true for generations - public schools continue to fail Indigenous students and communities. Now is an opportunity to redevelop school based learning to embrace Indigenous education, grounded in deeply rooted knowledges and relations with Land.

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